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Environmentálně signifikantní chování firem

Corporate environmentally significant behaviour

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Děkuji své vedoucí práce, Mgr. Evě Kyselé, Ph. D., za trpělivé vedení bakalářské práce a veškerou odbornou pomoc, kterou mi vždy ochotně poskytla.

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.....

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Abstract:

The aim of this bachelor thesis is to gain a deeper understanding of environmental factors affecting the case company, ŠKODA AUTO plc. Škoda is the biggest player on the Czech market, reaching the top sales and production position. The first part of the thesis is description of the company itself and its environmental practices and products. The second part discusses the car demand and supply on the Czech market. The final part is analytical, looking to internal and external factors affecting the company. The conclusions are afterwards summarizing and merging all the gathered information and the analysis. There we conclude that Škoda's overall position on the market is perfect for realising new products, such as electric cars.

Key words: environmentally significant behaviour, corporate strategies, manufacturing, environmentally friendly strategies, ŠKODA AUTO

Abstrakt:

V této bakalářské práci je cílem hlubší porozumění environmentálním faktorům, které ovlivňují společnost ŠKODA AUTO a.s. Škoda je největším hráčem na českém trhu. Dosahuje předních pozic v prodeji a produkci. První část práce obsahuje popis společnosti, jejich produktů a environmentálních praktik. Druhá část se zabývá nabídkou a poptávkou automobilů v České republice. Marketingová analýza se nachází v poslední části. Zabývá se vnitřními a vnějšími faktory ovlivňujícími společnost a její produkci. Závěr je potom věnován shrnutí a sloučení všech získaných informací z analýzy a zbylých kapitol. Škoda se v současné době nachází v pozici, kdy je pro ně výhodné a možné přijít s novými produkty, jakými jsou elektrická auta.

Klíčová slova: environmentálně signifikantní chování, firmy, ekologicky šetrné strategie, výroba, ŠKODA AUTO

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Introduction

ŠKODA AUTO plc is a renowned original Czech car manufacturer. For this thesis it was chosen as the case company because of its strong brand it has in the country, but also because of their biggest annual production participation in the Czech Republic (AutoSAP, 2018b). The aim of this study is deeper understanding of external environmental conditions forming the company's production and products.

Car industry is one of the most regulated industries from the government but despite that in the Czech Republic it participates largely on the national economics (Czech Statistical Office, 2018b; European Commission, 2016b). The deeper understanding of all factors influencing the production will give us the picture of where Škoda is situated on the market, what regulates and influences it and why their electric cars launch date has been delayed compared to other producers and set to the year 2020 (ŠKODA AUTO a.s., 2018b). This is important because of the Škoda's position on the Czech market. Their cars are one of the most accessible and potential prices of electric cars might be the much-needed change on the market. Škoda as one of the biggest producers and sellers on the Czech market has a shaping power over the car supply. The market in the Czech Republic is however still missing electric cars' producer, mostly importing such vehicles from the other companies.

In the first chapter of the work we will shortly look into the case company's history and more closely we will discuss their environmental behaviour starting with their own presented programs. In this section we will also look to certificates and electric cars vision which is Škoda preparing for the upcoming years (ŠKODA AUTO a.s., 2018b). Their manufacturing practices are going to be presented in the end of the chapter. The second chapter provides the insight to the car supply and demand in the Czech Republic and Škoda's position on the Czech market. The third chapter is the marketing analysis of the company, where several different analyses were conducted for deeper understanding of the company and its surroundings on the market. We will talk about its strengths and weaknesses in SWOT analysis, competition and position

on the market in Porters Five Forces, but also other external factors, such as political or legislative factors in PESTEL analysis. The conclusions then provide the full picture of all the factors, which prompted the case company to place electric cars into their portfolio as well to be environmentally conscious.

1. ŠKODA AUTO plc and its environmental behaviour

ŠKODA AUTO plc (“Škoda” and “the company”) is a well-known Czech car manufacturer entering the automotive world in the 1895. That time known as Laurin & Klement (ŠKODA AUTO a.s., 2019c). Company’s history was affected by the history of the republic and so during the communist regime the company became state owner in 1948. After the Velvet revolution and privatization, the ownership changed once more in 2000 by making Škoda part of the Volkswagen Group, where we can also find car companies such as SEAT, Lamborghini, Bentley and many others.

The journey started with a simple velocipede, through the first car types to the newest electric car designs. Škoda has always tried to keep up with the demands of the market but keeping it on the rather affordable level. By the topten server (topten.eu, 2019) Škoda’s cars are most used among the middle as well as upper middle class in Europe with bigger brands, such as BMW, or Lexus next to it.

The current vision of the company relates to their strategy for the 2025, which is adopted from the Volkswagen Group. In Škoda’s portfolio, it is said that their aim is to develop, produce and offer high quality, innovative and ecologically friendly cars, components, original parts, accessories, tools, services and to offer solutions for individual mobility. In Škoda’s portfolio we can find, that their products with their properties not only fulfil, but also exceed the anticipation of customers. In harmony with the strategy of Volkswagen and Škoda the aim of the company is to excite the customers and persuade them to come back to the company with the trust (ŠKODA AUTO a.s., 2018c).

1.1. Sustainability programs presented by the company

The main objective of this work is deeper understanding of environmental practices and forces which changes the company’s behaviour. Therefore, in this introduction part, we cannot overlook Škoda’s own programs and practices, which they present to their customers. We will summarize their GreenFuture program and Strategy 2025 and afterwards there will be ISO norms and their impacts to the

company's behaviour but also their offer of electric cars. Those agendas should be following Škoda's inside policy standards for sustainability, which stands on ecological, social and economic pillars (ŠKODA AUTO a.s., 2019e).

1.1.1. GreenFuture (ŠKODA AUTO a.s., 2017a)

This name was given to the company's department, which is supporting the sustainable future held by Škoda. Their aim is to provide customers, among other things, a vehicle, which is eco-friendly. On one hand, the goal is to lower the CO₂ emissions of produced cars, on the other hand the whole manufacturing process should lower the impact it has on the environment. Škoda is also aware of the end-life of their products. Therefore their portfolio of services is offering take-back services for used cars to ensure their proper recycling (ŠKODA AUTO a.s., 2019e). Nevertheless, this is also given by the law of the Czech Republic, which we will discuss further.

1.1.2. Strategy 2025 (ŠKODA AUTO a.s., 2019f)

Company set ambitious goals for the year 2025, which they call "Strategy 2025". Their electric concept is going to reach the market in 2020 but the full potential it will gain in 2025. That means ten electrified models. This concept is not solemnly environmental, but the wholesome strategy is connected with this year. Internationalization and digitalisation of manufactories is another point. Automotive driving and also better and more connected customers' service are other perspectives. In summary, this strategy is preparing the company for upcoming competitive years in the industry keeping the company competitive (ŠKODA AUTO a.s., 2019f, p. 17).

1.1.3. Environmental certificates

Škoda is proudly presenting itself with several different ISO standard certificates. ISO norms are binding for the company and in the EU in some industries and therefore we will look more thoroughly onto those accepted by Škoda. ISO 9001 belongs to the family of ISO 9000 standards, which represents quality management. These standards offer tools for companies to always meet customer's needs. Most

important parts of this standard are principles which provide customers with consistent and high quality products, as well as services, subsequently bring many benefits for the company itself ('ISO 9001 Quality management', 2019). This specific type of ISO standard is also connected with the EU legislative. Without this certificate the company would not be able to achieve the approval of the vehicle type. Deprived of the approval Škoda would not be allowed to sell cars on European market.

ISO 50001 is providing strategy of the Energy management for certified companies. Energy efficiency is not only environmentally friendly but cost-efficient and conserves resources. This ISO norm also provides the proper energy management system ('ISO 50001 Energy management', 2019).

ISO 14001 is also known as environmental management providing instruments managing environmental responsibilities. Boiral (2007) has found out in his case study of nine Canadian corporations that have adopted ISO 14000, that the initial decision for ISO 14001 certificate was institutional legitimacy. Companies are adopting those certificates because of the pressure from governments rather than for the benefit of the environment, just creating the image of environmental responsibility. ISO norms can therefore become just a minor marketing tool presenting companies as environmentally friendly, even though they are necessities required by government. Nevertheless, in Boiral cases there has been only relative improvements in the environmental practices therefore contrasting with the statements around rationality and other advantages of the standard. The growing dispersion of certificates such as ISO 14001 could be explained with the institutionalized systems of rational rhetoric, but also with external pressures and internal motivations (Boiral, 2007, p. 143). The overall standardization of companies is connected to the certification.

When we will look onto the price benefits of ISO certificates there are no immediate results and costs of achieving sustainability might be exceeding the sum that is acceptable by the management. However, in the long run good environmental management system (EMS) will lead to the projects which can make durable increases if continuous (Bansal & Bogner, 2002, p. 272). In the same paper Bansal & Bogner that

for a good working EMS it is necessary to look continuously into the areas, where sustainability was not yet considered (2002, p. 273).

Škoda is holding onto the ISO certificates because of the directives from the EU and pressure from the Volkswagen Group to become more environmentally conscious through the “2025 strategy”. So even though there might be a certain unwillingness of the company to do all those standards, they were not given much of a choice. Restrictions and reductions are rolling onto the industry also in the shape of the 2030 climate & energy framework by the EU which is targeting the period from 2021 to 2030 with cuts in the greenhouse gas emissions, renewable energy sources and improved energy efficiency (European Commission, 2016d) which will bring further restrictions or changes in industries through the EU.

1.1.4. Electric cars by Škoda

The first ever electric car in the history was a model built by Thomas Parker in 1884 but the advances of fuel engines weighted over their electric brother (Guarnieri, 2012). In the 90s in the USA, several manufactures, such as Chrysler, Ford and even Toyota, tried to re-introduce the electric vehicles with not much of a success. Tesla decided to break through again and in 2008 they introduced the first electric vehicle capable of travelling over 320 kilometres per one charge followed by huge sales of new Nissan Leaf (Shahan, 2015). The trend is growing and in today’s world all the companies have at least one electric car in their portfolio.

Škoda was holding back until recently, when they have introduced their VISION iV concept, for new fully electric car capable of the range up to 500 kilometres (ŠKODA AUTO a.s., 2019h). This should lift Škoda into the leading positions in the electric car market, which is led by Tesla’s cars capable of those distances as well (Tesla, 2019). Škoda has promised in their “Strategy 2025” to come up with a full electric vehicle by 2020 produced entirely in the Czech Republic. The company is making a milestone in their history by introducing also a plug-in hybrid in the form of ŠKODA

SUPERB and ŠKODA CITIGO in the full-electric version. Those models are not even the most sold models of their fleet, which is ŠKODA OCTAVIA (Příbyl, 2019).

CITIGO was chosen because of its size and urban focus with range of 300 kilometres. Plug-in hybrid SUPERB, is aiming for smaller ecological footprint with the same comfort for stale Škoda customers (ŠKODA AUTO a.s., 2019d). This new electric concept of the company is also meant to become a different lifestyle for customers providing charging stations and innovations in the charging system, as well as its distribution throughout Europe.

The Czech government is aiming at the concept of “Clean mobility” as well and not only because of the EU, but also thanks to the smog situation in specific regions and cities. The government is quite aware of the growing trend as well as interest of the consumers who are more willing to buy cars with alternative fuels even for higher costs. The same is visible with companies who are huge fleet operators (Ministry of Industry and Trade of the Czech Republic, 2015, p. 26). Predictions for the future from the ministry, nevertheless, have not been positive. It is because of the missing governmental support which lacks the strategy for development and also prices reductions for fully electric cars. Commercialization is crucial in the Czech Republic, as well as positive state regulation, which is now limited only to road tax relief and therefore the main users of electric cars are energetic companies themselves (Ministry of Industry and Trade of the Czech Republic, 2015, p. 32). Among the few of the users there are Moneta Money Bank, Eurovia and also a food delivery company Dámejídlo (Váchal, 2018).

Beresteanu an Li (2011) in their analysis of the US hybrid market have concluded, that increasing gasoline prices hand in hand with income tax incentives have increased the numbers of hybrid sales. In the United Kingdom during 2011 the government have decided to subsidy a purchase of electric vehicles with aim of lowering the emissions. Nevertheless the money reserved might not be used thanks to the then missing infrastructure for electric vehicles and therefore the money should be aimed at plug-in hybrid vehicles (Shepherd, Bonsall, & Harrison, 2012). In the EU there

are positive examples of countries, that have governmental support for the use of pure electric vehicles by citizens, such as Germany, Norway and France in the leading positions (European Alternative Fuels Observatory, 2018b; International Energy Agency, 2018). For example leading Germany, with over 100 thousand electric cars in total, not only has purchase subsidies but also ownership and company tax benefits, owners can use parking spaces for free and drive through the bus lane, including governmental infrastructure incentives in building as well as supporting charging stations throughout the country (European Alternative Fuels Observatory, 2018a).

All of the leading countries have a strategy including a variety of subsidies, refunds and parking spots encouraging citizens to “go electric”. According to the current Prime Minister, Andrej Babiš, the Czech government is not going to support the purchases of electric cars by normal citizens (Czech News Agency, 2019), because there is a subsidies campaign for companies and governmental offices. Leaders of the automotive companies are well aware that the transition towards electric vehicles needs to be gradual and will not happen without the governmental support in the sense of infrastructure, legislation and education (Czech News Agency, 2019). All of this is happening even though the “National action report of the clean mobility” (Ministry of Industry and Trade of the Czech Republic, 2015) concludes, that for the development of electromobility, it is necessary to combine the biggest motivators for customers - parking benefits and charging infrastructure. Also, the “National action report of the clean mobility” supports the connection of the governmental support with local governments and business in order to have an educative example to others, bringing the electric vehicle concept closer to the public.

Even though there are visible obstacles in bringing electromobility to the country, the aim was to have up to 250 thousand electric vehicles in use by 2030. Strategies of the ministry should have helped the consumers to decide in favour of the battery electric vehicles (“BEV”) - covering charging points, encouragements of buyers, possible electric problems and stimulating the demand (Ministry of Industry and Trade of the Czech Republic, 2015). But none of these aims and strategies are

possibly going to happen in the near future because the current government aims at companies, as mentioned before. The government is going to support the infrastructure and subsidies the purchases for local governments and companies, but the much needed boom of BEV among the citizens might be delayed significantly (Petrášek, 2019).

1.2. Volkswagen emission scandal

When we talk about Škoda and its environmental friendliness, we cannot forget to mention the emission scandal which has shaken the industry. In the September 2015 the emission case started when the United States Environmental Protection Agency accused Volkswagen Group from the violation of the Clean Air Act. The car company has intentionally programmed their TDI diesel engines to activate the emission control only while the car was laboratory tested for NO_x emissions, therefore meeting the limits for the US standards. Since 2009 till that day it was concerning eleven million cars worldwide. In Volkswagen's case, as a concern owning several other car companies, we are not talking here just about their own cars, but also about certain engine-types which were mounted onto Porsche, SEAT, AUDI, but also Škoda vehicles (Li, McMurray, Xue, Liu, & Sy, 2018a).

Consequently this deception concerns also 1.2 million of Škoda cars worldwide with this specific type of engine and in Czech Republic it was 150 thousand cars (Czech News Agency, 2015b). The mother company had tied hands in deciding what to do and admitting their mistake was one of the few options they had. Volkswagen has reserved 7.3 billion dollars to pay for the coverage costs of recall and repairs of affected cars (The Associated Press, 2015).

But what has led decision makers of the Volkswagen group to do such a thing, which was obviously wrong from the beginnings? Li (2018b) is arguing, that the company's policy, which includes financial benefits according to the length of the relationship between them and their employees, is the key factor stopping employees from criticising the company's misconduct. Various financial incentives are

influencing the salary and that is what possibly led senior managers to decide unethically (Cable & Vermeulen, 2016). Li concludes that just aggressive investments in environmental research are the only way to prevent such environmental scandals. The 'dieselgate' trickery in Volkswagen lasted for more than 10 years and none of their employees had pointed out the cheating behaviour. The senior managers had decided to keep it off the table from the public just for their own financial benefits. In today's globalized world they affected not only their own company, but as it came out later, also others, which were playing the reliable card and environmental card on the public. After the breakout companies have tried to smooth out the crumpled reputation by financial means with affected customers, accepting charges and calling off troubled cars claiming there are no more engines with such a mistake. But then again, that was the awareness of troubled cars as well.

1.3. Environmentally conscious manufacturing practices

When we want to talk about environmental responsibility in the company sphere, we need to start with the explanation of the sustainable development. EU has introduced whole Sustainable Development Strategy, which says: *"[The aim] was to identify and develop actions to enable the EU to achieve a continuous long-term improvement of quality of life through the creation of sustainable communities able to manage and use resources efficiently, able to tap the ecological and social innovation potential of the economy and in the end able to ensure prosperity, environmental protection and social cohesion."* (European Commission, 2017b). Some of those aims given by the EU are implemented into the Agenda 2030 (Strategic framework "Czech Republic 2030") in the Czech Republic, with aims and targets which shall be met in 2030, and also affects economics models and manufacturers (Government of the Czech Republic, 2015). These implementations should help the market of the Czech Republic to be able to compete on the global market, which is becoming more environmentally focused.

These laws and pressures from the government are slowly forcing a change in the market to become more sustainable in every field. Ülkü and Hsuan (2017) in their

study are focusing on both, consumption and production, and conclude, that sustainable production leads to sustainable consumption, and this should be applicable in any supply chain. The study was based on the possible modularity of the products, which represent a possible separation and recombination of the components and therefore represent a certain amount of savings in comparison to a standard product. Modularity is not necessary in all the industries and some should rather stay with the standard product and aim for sustainability then chase the modularity in all costs. In the car industry it should be refunds, recovery and back-selling with a possibility of remanufacturing of the old products into the new ones.

This strategy however is common in the EU car industry since 2005. One of Škoda's many customer services includes end-of-life products care, among which they consider which parts of an old car are still reusable and the aim is to go for the maximum re-use of all the materials (Škoda Auto, 2019a). It is given by the European Directive 2005/64/EC, which gives the motor-vehicles manufactures a quota for recycling which is set on: 85% from the cars weight has to be recyclable, 10% of weight energetically reusable and the rest of 5% is not currently possible to be recycled and therefore is left for the landfills.

If we get back to Ülkü's and Hsuan's (2017) research, Škoda's production looks sustainable and therefore the consumption should be sustainable as well. But the recyclability is given by the EU directive and nowhere is written how much of those recycled products should be reused by the car manufacturer themselves. In the end, parts of an old car are rarely, rather said in the ideal scenario, used in the process of manufacturing a new car thanks to the specifics of materials used. Raw materials produced by the recycling are nevertheless used again in other industries which might include the primary industry itself. The sustainability which Ülkü and Hsuan (2017) talk about would have to include the fact, that recycled raw materials from old cars should be used only for the manufacture of the new ones from the scratch. Starting it with the body, through tyres and glass, ending with car's plastic parts. Today's recycling processes are influenced by directive 2000/53/EC which makes the end-of-

life vehicles recycling the most environmentally friendly as possible, but neither directive says how much of a new car should be remanufactured from the old one and the sustainable cycle is therefore violated.

Primary material recovering was however solved in Sweden. They were able to introduce recycled iron to the market with raw materials and waste-management market as well as spare parts of ELV to be reintroduced on the car market itself (Andersson, LjunggrenSöderman, & A. Sandén, 2017). As a result, the secondary Swedish steel industry itself was affected with a helpful hand from political initiatives. Sweden is therefore a living example of possibly one of the most sustainable cycles of not only recycling but also producing and manufacturing new cars. Sure, there are still flaws and not all the parts of one car are reusable, or recyclable, but even this step towards sustainability is an important one.

Thus, how is Škoda environmentally conscious? Their behaviour is managed by the “2025 Strategy” of the Volkswagen concern which is setting up visions to become the world leader in sustainable mobility, coming up with visions, aiming for quality and happiness of their customers. Those visions are not only held up by the mother company itself but also by Škoda as well, through the car manufacture planning to the recycling in order to decrease the environmental impact to the minimum(ŠKODA AUTO a.s., 2017b).

2. Car supply and car demand of Škoda in the Czech Republic

In this chapter we will look more thoroughly onto the aspects of the Czech market which are influencing not only the overall but also Škoda’s supply and demand in the country. Shortly we will talk about the competition and market, which are going to be discussed more in the analytical section of the thesis. We will also look into Škoda’s annual production and sales.

It is obvious, that the automotive industry is playing a significant role not only on the market sustaining the economy, but also the position it gives to the country in Europe. According to the European Automobile Manufacturers Association’s statistics

(2017) the Czech Republic was on the fifth place of car production with almost 1.5 million cars produced, situating it behind UK, France, Spain and Germany as the leader in the EU. Even during the financial crisis in 2007, also known as the Great Recession, the Czech automobile industry was not significantly affected and has been experiencing a steady growth since then.

There are three biggest personal car manufactures present in the Czech industry – Škoda, Hyundai and TPCA (Toyota Peugeot Citroën Automobile Czech). According to Automotive Industry Association's data from 2018, Škoda has manufactured almost 832 thousand cars in the Czech Republic. Out of it, 87.5 thousand went for the home market and the rest of 747 thousand have been exported. Cars' first registration numbers are also showing a certain standard for Škoda. Škoda's registrations reached 84 thousands out of 261 thousand of total new cars that have been registered in the Czech Republic in 2018, which are almost the same numbers as in 2017 showing a certain stability on the market (Car Importers Association, 2017).

The 2018 has proved to be a good year for the local Škoda, as we can see in the graph 1. The company has 61.90% share on the overall Czech production, with Hyundai on the second place with 23.50% and TPCA with 14.60% (AutoSAP, 2018b). From the same period the numbers of home sales and export are also interesting (figure 1). Majority of production from all three manufactures has been exported from the country with the biggest home sales for Škoda slightly over 10%.

Graph 1: Companies participation on the overall production in the Czech Republic 2018 (AutoSAP, 2018b)

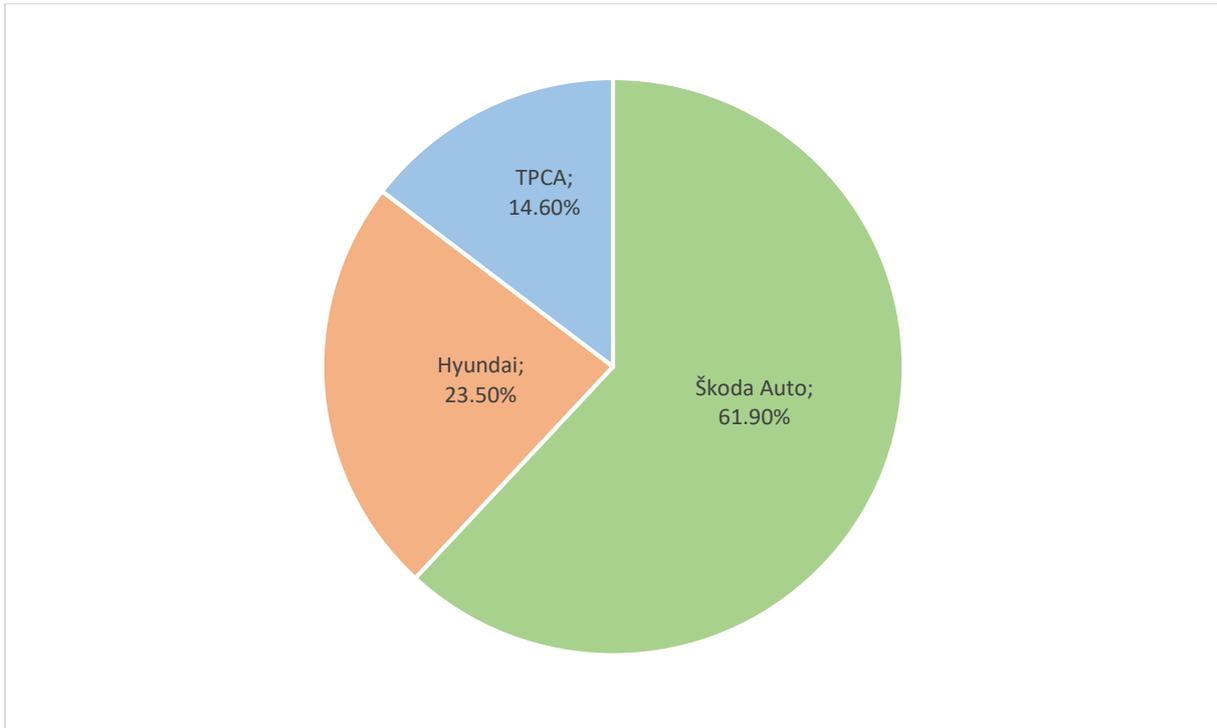


Figure 1: Home sales and export of manufactures in the Czech Republic 2018 (AutoSAP, 2018a)

Car company	Export	Home sales	Total	Percentage of home sales
Škoda Auto	747 188	87 511	834 699	10.48%
Hyundai	302 790	14 060	316 850	4.44%
TPCA	196 194	670	196 864	0.34%

These graphs can give us an overall consumption image of the automobile market in the Czech Republic. Cars manufactured in the country are not mainly sold there and are exported on other markets. In the statistics of Car Importers Association for the Czech Republic (2017, p. 18) in the chart of the new registered personal vehicles, Škoda still stands on the first place, with 29% share, the second comes Volkswagen with 10% and the third Hyundai with 7,5%. Those positions are mainly the same till 2004, with occasional changes on the third place, sometimes taken over by Ford. Škoda is therefore not only the biggest car producer in the Czech Republic, but longitudinally the most bought car brand in the country as well.

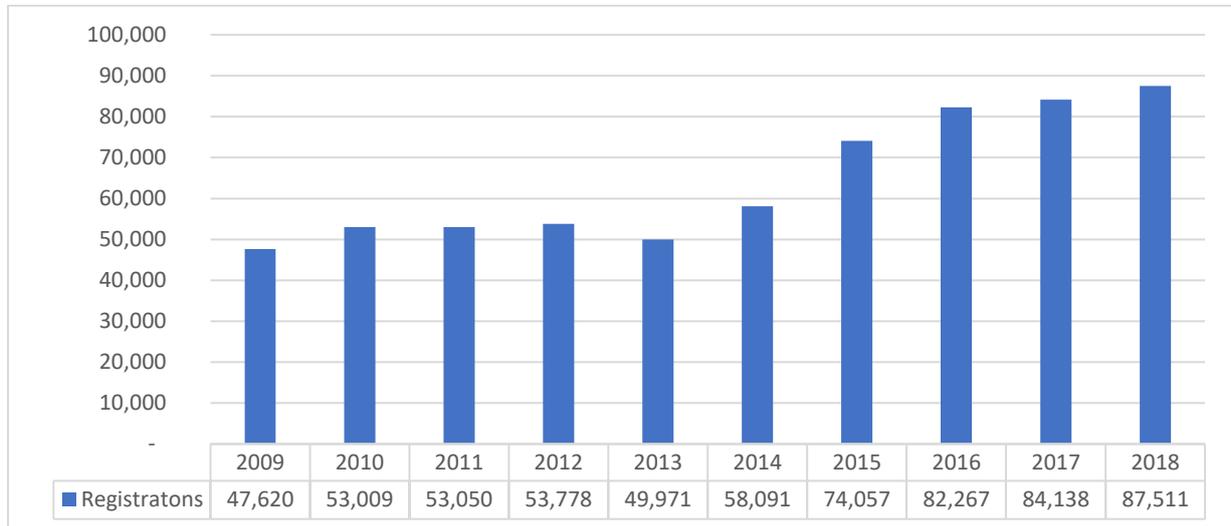
Talking about the cars supply and demand we need to take an account of the specific micro- and macro-economic factors, such as new and used cars prices, fuel prices, producers' costs, consumers' income as significant demand shifters. Rückl (2014, p. 61) concludes in his work, that the consumption of new cars in the Czech Republic depends on all the factors listed above, but also on the period of the year. There has been almost 30% increase in spring and summer time, compared to winter. This can be confirmed by Automotive Industry Association (2018a) data for monthly measurements of export and manufacture, where we can see a steep decrease in July, which can be given by the holiday period and a manufacturing plant shutdown, which is usually used for maintenance and improvements. Also, a decrease in sales during July, August, September and October is visibly corresponding with the market. The demand is also influenced by the new and used cars price ratio, even though it appears as price elastic and there is a close relationship between them, because used cars are considered as a substitute product. The price range of fuels has almost zero impact on the demand (Rückl, 2014).

The Czech statistical office is following the development of the main industries in the country, where car manufactures are playing a significant role. In their regular follow up of the Czech economy where the car industry follows the overall economic trend, we can find a decrease in the 2012 and 2013 which was affected by the economic crisis but rose in the following years. The last year was nevertheless crucial for the industry because of the change in the emission controls as well as filling up the stocks for upcoming season. However, the industry is experiencing stagnation because of the tension on the labour market as well as a slight production decline (Czech Statistical Office, 2018b, p. 11).

Talking about demand we should not overlook the product portfolio of the company. Škoda is aiming at the broad range of customers starting with mini cars, which are meant for the city use (Škoda Citi Go), small cars (Škoda Fabia), lower middle class (Škoda Octavia and Rapid), middle class (Škoda Superb), multi-purpose vehicle (Škoda Roomster) and SUV (Škoda Kodiaq). The range and a long-time

presence on the market is giving the company a certain advantage, where even the numbers are talking in the favour of the company as we can see on the graph 3. Registration of new Škoda cars has almost doubled since the 2009.

Graph 2: New Škoda cars registration in the Czech Republic based on the data SAP and SDA(AutoSAP, 2018a; Car Importers Association, 2017)

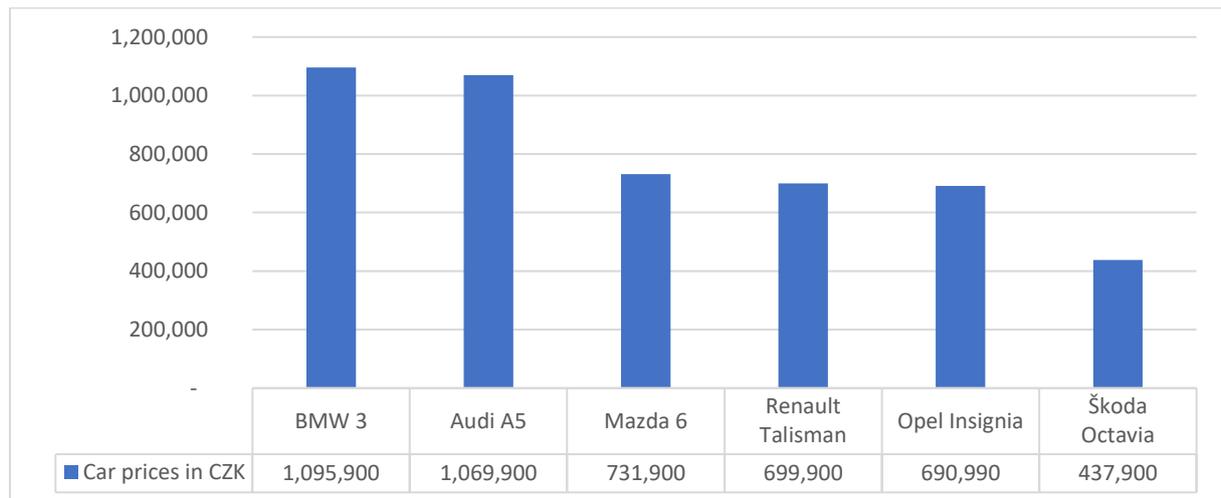


Dvořáková (2014, p. 64) in her content analysis of television advertisements concludes that Škoda's marketing is simpler than one might expect from a car company. They are not convincing buyers, rather just informing or reminding them of the company, because the decision of buying a car is too complex and individually made by customers so no advertisement made will directly lead to immediate rise in sales. Taking the high prices of the television advertisements in account, the aim of the marketing campaigns is for the costumers to remember the company for future decision and therefore some of the advertisements might come with an emotional undertone (Dvořáková, 2014, p. 67).

If we want to compare the prices of Škoda, it is necessary to consider cars with identical parameters. For the comparison we have decided to consider the Škoda Octavia, which has also become one of the most sold cars of the company through the years. This type of car can be regarded as the middle class car, next to Mazda 6, Audi A5, Opel Insignia, Renault Talisman and BMW 3 (topten.eu, 2019). In the graph 3 we can see prices of those models. Prices are taken for the brand-new model provided by the company itself and they are the starting prices for a given model. Price ranges are

quite significant in the category, starting with Škoda on 437 900 CZK up to almost 1.1 million CZK for a BMW. Looking simply on prices, forgetting for a while on the driving properties and brands, Škoda Octavia would be the choice for customers looking for the lowest price (Audi, 2019; BMW, 2019; Mazda, 2019; Opel, 2019; Renault, 2019; ŠKODA AUTO, 2019).

Graph 3: New car prices in 2019 in CZK (Audi, 2019; BMW, 2019; Mazda, 2019; Opel, 2019; Renault, 2019; ŠKODA AUTO, 2019)

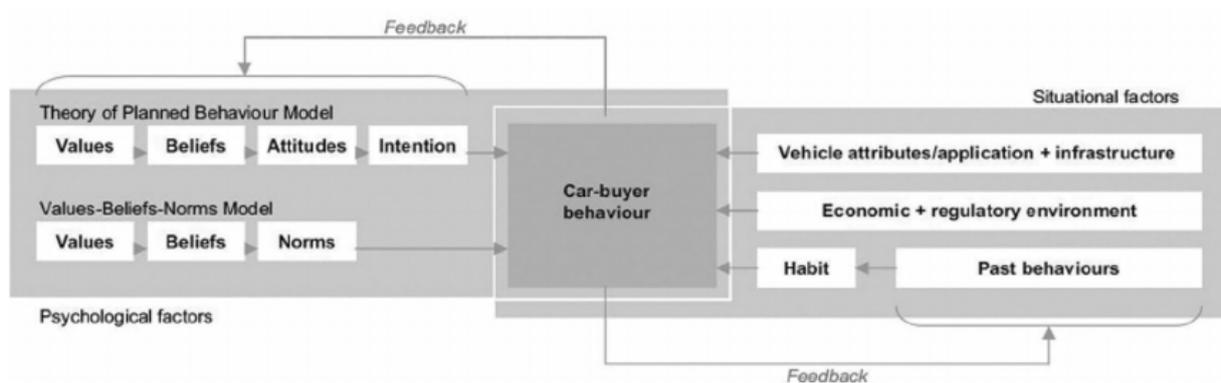


Resales of used cars are not only common but also popular option for a lot of buyers on the Czech market. The research done by the Ernst & Young (2016) was looking on trends on the market, and the results have brought a revelation that Czech market is divided between the buyers of strictly new cars and those who prefer used ones. This trend is playing Škoda into its cards and they are supporting the resales of old and used cars through several programs via external providers.

Sure, we cannot take the purchase of the car as simply like that, because other factors are playing a role. Lane and Potter (2006) describe in their work a model of behaviour of car-buyers shown in the figure 1. Psychological and situational factors are playing role and they can be influenced. The economic factors which are positioned in situational factors can be influenced by the purchase tax, subsidies and other circumstances. Psychological value can then be changed according to the prestige of the brand. Psychological factors are strongly individual and therefore predisposed to a certain purchase decision. In the car purchase situation, the significant role can be

played also by the buyers' knowledge of price differences, they might pick more status showing brand, such as Audi or BMW even the price range might be higher.

Figure 2: Lane and Potter's (2006) model of individuals' car purchasing decisions



3. Marketing analysis of Škoda Auto

For further understanding of the company, it was decided to do micro and macro analysis of the company's surroundings. If we want to understand company's decisions and their processes there are other factors influencing them, such as politics of the country, competition, specifics of the market and others. In this section we will look onto those factors more thoroughly through different analysis. For the macro analysis we will start with PESTEL which provides various external macro-environmental forces impacting the organisation. Results are afterwards used in marketing SWOT analysis. For micro analysis the industry itself is going to be analysed from basic characteristics to the factor of success in Porter's Five Forces analysis. Each analysis will have a short summary. Together those analysis will provide us with a full picture of a situation the company is currently positioned on the market which will be discussed in the end.

3.1. PESTEL analysis

PESTEL is an acronym for macro-forces which are externally influencing the examined organisation. It stands for *political, economic, social, technological, environmental* and *legal* factors. This is a marketing tool usually done before any new strategy or tactics is implemented to have a situational analysis. It should be done

regularly by the company in order to see changes in the macro-environment and therefore see differences and necessities to differentiate from the competition creating a possible advantage. This analysis should be done before any major decision is made or any new product is released to the market (Oxford College of Marketing, 2016). The depth of the analysis is self-based and can be aimed at any direction necessary, but for the needs of this bachelor's thesis we will mostly take the environmental part with electric cars concern.

3.1.1. Political

Political factors in the analysis are not only laws and regulations given by the government, which are discussed later, but also political stability in the country, tax policy, trade restrictions and others. Therefore, the national stability, foreign political situation, EU membership and others are going to be discussed. It is important to set how much the governmental policy might impact the decisions made by the company and what might stop them.

Czech political environment is strongly connected with its economic, which is one of the most advanced economy in the central east Europe. According to the Index of Economy Freedom (2019) Czech ranking is 13th of 44 European countries and world and regional rankings are above average for the location. Politics is currently experiencing polarization, being drawn back to the communism and its leftish coalitions. Nevertheless, its staying positive in the questions of the EU membership, business and fiscal policies. Previous government brought favourable taxes for the industry, being set on the 19% for corporations, opening the borders to global investments and trade (Mečířová, 2019). Country's prosperity is largely built on the automobile exports, thanks to which it has the highest GDP growth rates in the EU (Žurovec, 2019). After 30 years from the Velvet revolution the country has lowest unemployment levels and still growing standards of living, pushing the Czech Republic to the western standards (Index of Economy Freedom, 2019).

However, Škoda's sales on the Czech market for 2018 were only 7.5% of their whole production. The rest of the middle and west Europe is the strongest combination of markets for them with 48.3%. But the strongest single market for the company is China with 27% of all sales (ŠKODA AUTO a.s., 2019g). Positive political relationships with China, are therefore very important for Škoda as well as the membership in the European Union. Škoda went against all possible odds to penetrate the Chinese market, which is also specific for its requirements and regulations and many businesses are therefore discouraged from doing so (Embassy of the Czech Republic in Beijing, n.d.). Even though the Czech Republic differs from China by size significantly, it is an important part of the Chinese economic. Current president, Miloš Zeman, is building a good relationship, which is important also for China as an open gate to the whole EU. President, Miloš Zeman, is not only upholding those good relations, but also protecting them even against the current pressure from other governments (Golis, 2019). Škoda is however not only exporting to China, but also produces there and some models are made particularly for that market (ŠKODA AUTO a.s., 2018a). Good position on such a specific market might be strengthened by those good governmental relationships, but small political disputes are not going to affect the company in any way, as long as they stay on a decent level.

Another important market is Germany, with 14% of Škoda sales in 2018 (ŠKODA AUTO a.s., 2019f). Thanks to the EU and the existing single market policy, Škoda can freely trade with any country in the Union and only specific restrictions apply to them (European Commission, 2018b). Also, the mother company, Volkswagen, originates in Germany and Škoda is partly using their sales network. Therefore, tight political relationships do not apply on the market directly.

British Brexit might nevertheless be the example of an important political influence. Even though the British market makes only around 6% of the production, Škoda has a great reputation in the country (Czech News Agency, 2015a). Uncertainty still surrounding the Brexit is affecting some of the industries already. Closing the borders, tariffs, logistics – all those factors would affect the prices of imported goods

to Britain, which might affect companies and therefore the working force as well. Everything now depends on the decision which will the British government make and on the EU negotiators (Ministry of Industry and Trade of the Czech Republic, 2019).

3.1.2. Economic

Those factors are mostly impacting the economy's performance which is affecting the company's profitability, such as, unemployment rates, average wages, GDP, inflation rates or the economic cycle in the country but also the basic economic information of the company. In Škoda's case we need to consider also the other markets they are trading with. International economical situation needs to be taken in account as well because all those factors are affecting the company and their decisions. We will look also onto the Škoda's export rates.

The national rate, which indicates the performance of the Czech economics, was positively influenced by year-on-year trade surplus in motor vehicles market in the end of the 2018. From the commodity aspect the most important export items are machines and vehicles. The year 2018 was record breaking for the export, even though the end has brought a slight decline. The future predictions indicate a slowdown in the foreign trade because of trade partners. The year-on-year growth in machines and vehicles export was 3.8 % making it 6.9 billion CZK difference (Czech Statistical Office, 2018a).

Current inflation rate has reached 2.7 % growing slightly over the last year affecting the price growth in the economy. Inflation rates are for the past two years nevertheless kept within limits between 2 and 3 % mainly because of the food and drinks prices together with housing and electricity prices which are slightly growing (Czech Statistical Office, 2019b). The inflation rates are important because of the price increasing in the country, because of the money supply in the economy (Barnes, 2017).

Looking on the economic cycle of the country we can expect a slowdown in the upcoming months of 2019. The definition of the economic cycle is: "*...the natural fluctuation of the economy between periods of expansion (growth) and contraction (recession)*"

(Kenton, 2019). Especially we need to look onto the labour market which shows growing numbers. Unemployment numbers are still declining reaching 2.1% in the beginning of the 2019. Other factors, such as GDP, industries or consumption are on the edge of slowdown in the whole cycle. GDP in the country in the last quarter of 2018 has grown by 2.8 % and is expected to grow slightly in 2019 (Czech National Bank, 2019). It shows an overall instability of economic cycle specifically in individual segments of the economy. All segments are moving towards, or are already in, the downswing in the economic climate traces which are conducted out of climate indicators which are rid of the short term fluctuation (European Commission, 2018a, p. 24). It is caused mainly by the tension on the labour market. Yet, this trend might not have a cyclic character but rather it is becoming a structural problem in the country. The cycle is hard to predict and rather is made retrospectively by the economists, but this movement is showing an upcoming crisis which might affect the economy (European Commission, 2018, p. 12; Ministry of Finance of the Czech Republic, 2019).

Average wages in the country by the Czech Statistical Office (2019a) has reached 33 840 CZK in gross wage. In Škoda the average wages for 2018 are 58 704 CZK counting with agency staff, based on the calculations from the annual report (ŠKODA AUTO a.s., 2019f, p. 140). During crisis however, wages that are over the rate of average wages might expect a shock. Declines in the firm production will result in lowering the numbers of workers in order to maintain their wages, or lower their working hours with decline on the pay (Popov & Rocholl, 2018). Škoda in the past years increased the wages also with the lack of educated personal, which might come back hard on them if economic crisis should occur. Wages, even when rigid, can show to be flexible during the crisis. Falling wages result in lower income for employees resulting in lower demand for goods. Economy is destabilized by those flexible wages and it should be rather provided job security. Anxiety caused by this phenomenon leads to bigger savings and lower consumption which could be prevented by governmental regulations (J. Stiglitz, 2009, p. 11).

Another important market for Škoda with specific economy is China. For Škoda it is important the success and a good name of their company in China, which might protect them in the possible crisis thanks to the differences in the economy. Chinese economy, in the past years was pursuing a growing GDP to reach on their biggest competitor, the USA (The World Bank, 2019). China's system is also specific for the national ownership of banks, which is partly stabilizing the economy. Small provincial banks are however growing in their strength and possible crisis might occur in the upcoming years because of the destabilisation of the system. But there are also other factors upholding the economy allowing it to grow – stable market supported by the government, increasing quality of human capital and openness to develop economies (FocusEconomics, 2019). Also, China is stimulating the rest of the world through the international trade, finances and governance. Through those channels China might become a number one player in the world economy (Jin, Li, & Wu, 2016). It is hard to predict when and where the crisis will occur and with what strength it will affect the car industry.

3.1.3. Social

Social and demographical factors are describing working force, population in the country, customers, educational level, trends in the society and others. These factors are important for the company because of their final consumers. Trends in the society are changing rapidly and it is important for the company to keep up with them in order to provide the best possible product (Oxford College of Marketing, 2016).

Škoda's customers vary dramatically thanks to the range of cars they are providing. Small city cars are made for the city usage by deliveries and workers with none or small children. Luxury hatchbacks are for top management of various firms and companies, or simply for comfort looking individuals with families. SUV's are usually meant for outdoor lovers or bigger families. Compared to, for example, Bentley, which is solemnly made for wealthy businessmen, Škoda is more variable in their customers.

The main working force of the Škoda is situated in Mladá Boleslav where the company originates and there are 23 thousand workers (Czech News Agency, 2018a). In 2018 they had over 30 thousand employees. The same year has brought a new style of working schedule starting the trend of working Saturdays. This trend would have created new 3 000 positions, producing extra 75 thousand annually. Trade unions are against such a policy also because the compensation in the salary is not sufficient enough. It is given by the demand for new cars and the waiting time for a new car can reach up to half a year and that is the reason behind the extra working day. Not only the unions, but also professionals argue, that in the case of partners working in the company on the affected positions, they would only see each other full weekend just six-times per year (Hrabica, 2018). That would have affected the family-life significantly. This is the opposite trend than we see from other western countries, where the working hours for workers are decreasing.

Social trends in the car purchase are changing with new generations coming to the market. Study conducted by pwc group (Kuhnert, Stürmer, & Koster, 2017, p. 16) is describing three different types of customers: *modern*, *transitory* and *traditional personas* which are currently the biggest moving force of the industry. According to their terminology *modern personas* are usually young, childless trends following users, which expect from the future transport autonomy, electrification and shared service. *Transitory personas* are the ones with kids in their late thirties who use cars for long journeys and cars are usually shared in the family. Those individuals are looking for safety, public transport but they will not give up their car even in the future. *Traditional personas* are still going to be car-centred, owning their private car which will not be electric and accepting just semi-autonomic taxis. Those predictions are made for the whole world in 2030, where China will catch up with the rest of the world, or even move forward with their policies applied. Europe does not look that promising, being categorised as a transitory persona. The development is expected in the field of autonomous driving which might be accepted for public transport.

Nevertheless, it is hard for all car companies to keep up with the trends in the society and there is always risk involved when introducing a new car (Bannister, 2017). A car, which looks like a perfect fit for the market in the time it goes into production, it reaches the market half year later and trends might change over that period, but the car is stuck on the market for many more years. Also, a car, that looks not so suitable, might strike records in sales. Kristian Bannister (2017) also in his article points out, that by 2020 almost 40 % of buyers are going to be millennials which are going to research their purchases online. Companies therefore need to build up a strong internet connection with them in order to succeed. But not only that will be the deciding factor in the upcoming years, companies answering to the needs and request of the generation will win their favour. Such as environmental footprint, electric cars, autonomy, connectivity, car ownership, human rights or other factors will play a main part.

Each culture is specific in its own way and that specifics are mingling with working habits. Czech culture is no different. Perfectionism is considered, compared to Germany, delaying and unnecessary. In the business meetings then a certain amount of improvisation is a welcome feature, showing flexibility and adaptability. That can prove as crushing dealing with other cultures. Sudden changes can also bring problems with deadlines, prolonging processes. Another typical feature is fluctuating self-confidence. Apologizing to the partner for petty imperfections which would not be noticed is considered normal in the country (Nový & Schroll-Machl, 2003).

3.1.4. Technological

Innovations in the industry but also in the technology used by the company need to be taken into account. The overall technological level of the company, infrastructure, development in the industry, or science and research might affect the company. As every other factor, it is important to look onto those factors continuously for the company to succeed on the market (Oxford College of Marketing, 2016).

Škoda is a company making not only technology, but also working with it on a daily basis. Robotization, automatization, IT and others are pervading the firm from

the top to bottom. Internal technical standards are covering informational technologies, machines, through specific parts of the car manufacture to electricity and heating (ŠKODA AUTO a.s., n.d.-a). All those aspects are influencing the work Škoda does and today's progress in technology is giving them an advantage.

Modern car consists of almost 10 thousand parts and even though not all is assembled in the main factory the process is demanding. Assembly line is known to the world since Henry Ford's time simplifying the whole process of producing a car to the most basic steps, allowing even low qualified workers to participate on the production. First few steps, like pressing, varnishing and welding, are mainly handled by machines, preparing the skeleton of the car. Assembling is afterwards handled by workers, finishing the car to the required form (ŠkodaHome.cz, 2014).

Infrastructure around factories is crucial for such a huge producer. Unfortunately, that is what is missing in Mladá Boleslav, being the main factory for Škoda in the Czech Republic. Import and export to and from the company is based on the transport even though we are talking about short distances thanks to subcontractors being situated mostly around Mladá Boleslav. Old and missing railroad system is also one of the things that should be changed in the future, but nevertheless are slowing down the current expansion of the company. The road system also needs a rapid modernization. This should not be achieved by only the government, which promised to invest 3.8 billion CZK by 2021 to the much-needed infrastructure, but also by Škoda's support as well as the local municipality in Mladá Boleslav. Growing work forces are requiring new living spaces as well as kindergartens and schools, capacities of which should be increased in the upcoming years (Czech News Agency, 2018b).

Central Bohemian Region, where Mladá Boleslav is located is specific also for highly educated working labour. Secondary schools there specialise in the technical fields and Škoda itself has a University which offers full scale education with a practical part offered by the company. Škoda is therefore educating their working forces to their demanded level (ŠKODA AUTO University, n.d.).

3.1.5. Environmental

In the past years the Corporate Social Responsibility has grown on its importance and therefore also these factors are taken more thoroughly. The carbon footprint, emissions, environmental protection and raw material protection are directed by governments. The EU itself has a series of laws and regulations limiting the ecological impact massive factories might have. But also, the introduction of electric vehicles to market have to be taken into an account. Environmental footprint is a growing trend in a lot of productions changing the way everyday tools are produced and used. Especially in the car industry it is visible a lot, therefore changing not only the emission made by a car, but also the car production itself. Environmental and legal analyses are going hand in hand in this case. Legal directives and laws are changing industry in the real life, but also other factors are playing a significant role.

Society is experiencing a small decline in the concern of the environment, being aware that such an issue should be discussed, but feel rather helpless on such matter (Poortinga, Whitmarsh, Steg, Böhm, & Fisher, 2019). In the same study there are however significant several factors affecting the environmental concern in some countries and also there are major differences on the national level. In the car industry the environmental issue includes not only green production, but also green products in the shape of the alternative fuel cars. On those products the company is aiming their productivity for future years.

Electric cars and their production might also be affected by the possible economic crisis, which we have talked about earlier. During the crisis car sales are affected the most but all industries are experiencing a decline (Moore & Mirzaei, 2016, p. 178). The perfect example is Volkswagen Golf. The fully electric Volkswagen e-Golf, which is already purchasable, costs almost one million CZK, compared to the “normal” Golf, which price is around 450 thousand CZK (Volkswagen, 2019a, 2019b). The same car equipped on the same level, just with a different engine, differs in price drastically. This price difference might be therefore affecting sales of the BEV such as

e-Golf. Even if the state subsidies would be present the purchase-price might be still too high for some customers to buy the electric version and they would choose the cheaper alternative (Björnsson& Karlsson, 2017).

On the Czech market the decisions for the combustion engines over the BEV were made because of the higher prices or even the length of the charging cycle. In a recent research, on possibilities how to expand the support for electric cars, scientists conclude that the possibility of customers buying BEVs in three upcoming years grows with prices being similar to classical vehicles, lower maintenance costs and growing driving range (Ščasný, Zvěřinová, Rajchlová, & Kyselá, 2019, p. 54). From the same study we can conclude that purchase price was one of the most important characteristics for respondents, in order to decide for BEV.

In Škoda's case just time will show how their BEV concept will grasp with, not only their competition on the market, but also with the obstacles brought by the government. Škoda's new electric-car concept will not be aimed just for the Czech market, but for the whole Europe, as well as China, which is highly supporting electric cars purchase, and is the strongest of Škoda's sales market (ŠKODA AUTO a.s., 2019g). China has been an important player on the market of electric vehicles influencing trends in the world (Song, Yang, & Lu, 2010). So even though the upcoming VISION iV is going to be constructed in the Czech Republic, and therefore supporting the Czech economy, main distribution of the first fully electric Škoda car might occur somewhere else.

3.1.6. Legal

Škoda is influenced not only by the laws of the Czech Republic, but by the EU legislations as well as the laws of the countries they are exporting to. The outside pressure on the car manufactures to be more environmentally conscious is enormous. The upcoming sections are divided into two parts – first are laws and directives, which are influencing the car industry directly and second are the specific laws implemented in the Czech Republic.

3.1.6.1. European Union environmental regulations concerning the automotive industry

The European's prosperity is largely built on the back of the automotive industry which provides jobs for 12 million people and therefore participates on the 4% of the European Union's ("EU" or "Union") GDP. Being one of the world's biggest producers, EU largely contributes to technological leadership, strengthening the competitiveness as well as foundation for the research and development (R&D) in the automotive sphere (European Commission, 2016b). Financial support going into the R&D is going mainly to green vehicles, safety, infrastructure informative technology and decarbonisation of the conventional engines.

European Commission ("EC") is aware of several environmental unfriendly facts the automotive industry brings, starting with emissions, noise and fluorinated GHGs used in air-conditions. CO₂ emissions in 2016 were made by 15% out of the road transport in the EU. This number should be reduced by emission limits for newly manufactured cars with new testing procedures not only for emissions but also for laboratory tests effective from the 1st September 2017 (European Commission, 2017c).

These procedures were followed in the period after the 'diesel-gate scandal' forcing EC to act towards Member states in a form of infringement procedures to ensure the European law is accounted for. Member states are also called upon to ensure all affected vehicles are either fixed or withdrawn from circulation to ensure rapid reduction of diesel-fleet's NO_x emissions (European Commission, 2017a). Each member is hence responsible for actions taken in order to fulfil this directive himself.

There are not only limitations in car emissions but also air quality levels which are monitored. There are going to be new objectives policies for the air quality up to 2030, stricter emission ceilings for main pollutants and fostering of zero-emission cars.

Noise levels have not changed in the EU since 1995, which is a good example of technology moving forward. Nonetheless, the new regulation which was adopted in 2014 should reduce those levels up to 25%. New test method introduced will lower

the limits proportionally in two steps in 11 years from the regulation publication(European Commission, 2014). Minimum noise is measured and tested in the electric and hybrid electric cars so only adequate sound generating devices are mounted onto the new vehicles.

The reason for the EU to be that supportive and protective over the whole car industry is simple. Not only it is one of the biggest employers in Europe, as we said in the beginning, but also there is a huge multiplier effect in economy, affecting chemical, textile and steel industries as well (European Commission, 2016c). Nevertheless, the way of showing the support might look like a too much protective mother. In the final report of the CARS 21 (A Competitive Automotive Regulatory System for the 21st century) in 2006 the EC admits that there are over 56 different directives and other 100 by UNECE and therefore the European vehicle industry is one of the most regulated (Publications Office of the European Union, 2006).

The rest of the world is however not that strict with their environmental regulations and a certain harmonization in those regulations misses. For example, the CO₂ emissions in the USA, Japan and China have looser targets compared to the EU and even though all of those sectors signed the Paris Agreement and therefore are targeting the greenhouse gas emissions mitigations those targets might not be accomplished by all of them. While Japan and EU are probably going to decrease the overall emissions with their current policy projections, USA are most likely going to stay on the same level emission production as they are now and China's emissions might be still growing (Climate Action Tracker, 2019). The Paris Agreement sets a goal for global temperature increase to be annually up to 2°C and each signed country has to set up plans and regularly report to the overall contribution. The Agreement is not setting up standards for the rules made and goals planned, and therefore the actual regulations for specific sectors among countries might differ significantly.

If we get back to the EU environmental regulations and their added manufacturing costs, from 1992 up to 2016, it was between €750-2,300 per car. The goals settled for 2020 and the target for CO₂ below 95g/km will increase costs around

€1,000-2,000 compared to a car manufactured during 2010 (FTI Consulting, 2015, p. 23). Even though manufacturing prices for companies are growing, the prices for cars were growing only with inflation and therefore car prices were flat during the period. Manufacturers had to take up all the costs without influencing customers and their prices. The EC is aiming for the car industry to become not only environmentally friendly, but also to be able to compete on the global scale even with all directives implied (European Commission, 2012).

Considering only the EU directives, goals, reductions and support, the impact onto the car industry is huge. The limits for pollution are getting lower with each directive made, specifying how much of nitrogen oxides (NO_x) can be released in one kilometre, forcing companies for investments into new technologies and new engine models. Developing and selling electric cars is being controlled by noise levels as well, technologies and materials used from the law on one side, and customers' demand on the other. The past years after the Diesel-gate scandal Škoda has probably done everything in their power to stay off the EU radar and do everything by the book.

3.1.6.2. Czech regulations for the automotive industry

The market in the Czech Republic is made by 9% of GDP out of the automobile industry providing 150 thousand job positions. Export of the country is made by it up to 25%. The Ministry of Industry and trade is well aware of the overall trends in the industry and is willing to support it outstretch by supporting new technology innovations together with implementing alternative vehicle's directives from the EU. Automotive industry association in the CR has committed to invest into research and development of alternative fuels and autonomous cars, and participate on sales of electric vehicles (Ministry of Industry and Trade of the Czech Republic, 2017).

Nevertheless, the implementation of European laws and directives is not always easy for the member states. The problem comes from the amount of regulation, implementation period and also with the implementation's content (Ministry of Interior of the Czech Republic, 2013). EU laws are superior to the laws of the country

and therefore countries must subordinate to them. The EU mostly uses guidelines, which provide only the end result and states have a freehand in methods and forms of achieving the result.

In the environmental sphere, the Czech government has a process for environmental impact assessment, also known as EIA. The aim of this process is to determine, describe and evaluate future influence of the given processes on the environment and public health (Ministry of the Environment, 2008). During the process, buildings, activities and technologies should be evaluated in order to protect the environment as much as possible. Škoda has to fulfil law requirements when they want to expand in their production halls or build completely new manufacturing sites. The act was modified by the EU regulations but was effective in the Czech republic since 2002 for water and soil protection (Vláda České republiky, 2002).

Laws and directives around packaging, waste management, reusability and others, which we have mentioned in the EU section, are also effective in the Czech Republic, which has signed up for following EU directives when entering the EU.

3.1.7. Summary of PESTEL analysis

Overall position of Škoda on the market is strong with high level of educated working force, as well as their car portfolio. Also, the market is prepared for new technologies, such as electric cars, and therefore, their steps towards that are well prepared. The EU requirements for lowering emission and support is also a good indicator and possible player in favour of BEV (European Commission, 2016c). The Czech market is however still specific and BEV's support is aimed just at business and local governments, excluding normal citizens (Czech News Agency, 2019). Even if their new electric cars are not going to be successful in the Czech Republic, they might experience a huge success on other markets, where Škoda stands strong, for example China, or even Germany (ŠKODA AUTO a.s., 2019g). Škoda is also aware of possible economic crisis compartmentalizing their sales and production.

However, the company is a strong player on the Czech market, providing working places, supporting the economy and also their products are popular among citizens (AutoSAP, 2018b). So even though the Czech market is not providing them with the biggest revenue, they will not leave it any time soon. Also, their electric perspective, which is being pilot tested in the country, will be given a try probably aimed at other business and local governments around the country (ŠKODA AUTO a.s., 2019i).

3.2. Porter's Five Forces

This analysis works with industry and its risks. It is based upon development forecasting of competitive situations based on possible subjects' behaviour on the market and risks it brings to the company. There are five forces present in the analysis – *competition in the industry, potential new entrants, suppliers, customers and threats* (Bělohlávek, Košťan, & Šuleř, 2006, p. 197). If any of those forces is stronger than the others, the more pressure should be developed in the company's strategy in order to stay successful on the market.

3.2.1. Competition in the industry

Car industry can be segmented onto 14 large company groups owning the biggest players in the world, naming few, Ford, Toyota, BMW Group, Nissan, Hyundai and Volkswagen. All of those groups own three or more car companies (Gould & Zhang, 2018). On the outside there might be a competition between Škoda and Volkswagen or even Audi, but all of those belong to the same conglomerate. The industry is huge and fragmented, largely depending on the sale country itself. In the Czech republic, by selling numbers, we can say, that Škoda's biggest competitors are Volkswagen, Hyundai, Ford and Dacia (Car Importers Association, 2017).

Also, Chinese market is currently experiencing a boom in a patent request numbers, also thank to the governmental targets. Import and export of technology is therefore under a certain surveillance in order to prevent external forces to change the

course of technology and also to have the upper hand in such matter. Any technology imported needs to be submitted to the government which therefore can use it for its own needs (Prud'homme, 2012, p. 12). This concerns also Škoda and any innovative plans they might bring to the country, even though they are manufacturing there. Possible competition of a Chinese sort might suddenly appear out of nowhere.

Car industry is massively influenced by the economical growths and declines and is corresponding with its cycles. Competition is therefore on its place even though it is more than hard to convince customers to change their behaviour especially in this industry. The globalised world is providing us the chance to own anything from the opposite side of the world, if we want to. Škoda cars are exported and made in China, for their market, for example (ŠKODA AUTO a.s., 2018a). With this trend it would be at hand to think, that competition among companies all over the world might die out or at least weaken its force, but the opposite is true. Local markets are becoming more and more important for companies and local successes are making up their brand. Localised networks are being clustered onto the smaller geographical regions aiming on culture, specific customs, values and economic factors (McNaughton & Brown, 2018, p. 3).

The biggest competitions for Škoda on the Czech market are Volkswagen, Hyundai, Ford and Dacia (Car Importers Association, 2017, p. 18). Škoda's diverse portfolio allows them to compete with each of the brand on their most sold levels winning in all of them. However, we shall not forget, that each market in each country has its specifics and customers will be behaving accordingly. For example, in the neighbouring Germany BMW, Mercedes and Volkswagen are experiencing a success in sales much bigger, then in the Czech Republic. Volkswagen cars are the most sold cars in the country with Golf being their flagship (Bekker, 2019b).

For Škoda the biggest competitors are separated onto the car types they offer. In the mini cars section, where ŠKODA Citigo is offered, it is for example Fiat 500, Toyota AYGO, Hyundai i10, Volkswagen Up!, Peugeot 107 and other small dimension cars on the market (Láník, 2011). In the Czech sphere, Škoda Citigo is one of the most

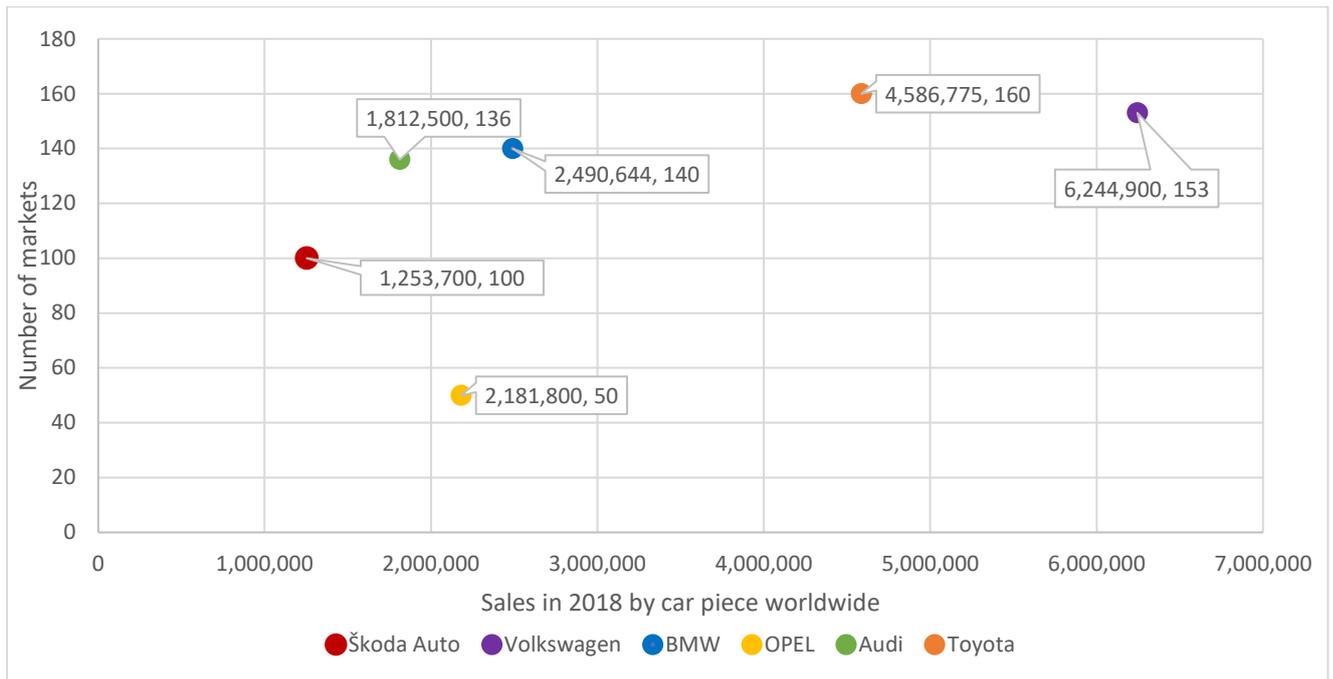
sold mini cars type on the market, with almost 3 000 new registration for 2017. For Hyundai i10 it was half that number (Car Importers Association, 2017, p. 22).

In ŠKODA Fabia's competition group we can find Citroën C3, Ford Fiesta, Hyundai i20, Opel Corsa, Toyota Yaris, Volkswagen Golf and others (Matoušek, 2018). Again on the home market Škoda's sales stand the highest for Fabia, over 21 thousand, followed by Volkswagen Golf and its 7,5 thousand new registration (Car Importers Association, 2017, p. 22).

From numbers we can tell that Škoda does not have a strong competition on the Czech market and their sales are strong. Nevertheless, other big players, such as Volkswagen is stepping on their heels, as well as Hyundai with lower sales than Škoda, but still with sales that cannot be overlooked (Car Importers Association, 2017). We still have to keep in mind that buyers' preferences differ market to market. In neighbouring Germany, the winner of sales per year is Volkswagen, with a little less than 19% shares on the market (Bekker, 2019a). Škoda is holding 6% shares on the same field. In total numbers for the best-selling car models in the whole Europe, Volkswagen is leading with its Golf and Škoda is situated in top-ten with its Octavia (Bekker, 2019a, 2019b). Škoda is showing that it is capable of competing with much stronger and older brands, thanks to the push coming from the mother company Volkswagen Group, whose capital, market experiences and sales point Škoda is possibly using.

From the graph 4 we can see, that even though Škoda's annual production numbers are low, their participation on the global market is surprisingly high, participating on 100 markets. OPEL is producing a greater number but delivers just on the half that number. The biggest market participation has Toyota, followed by Volkswagen. For the latter it however shows the highest sales of all the displayed companies. Škoda also aims for growing production which might push it in the upcoming years over OPEL or even BMW.

Graph 4: Competiting groups map - sails in 2018 on the number of markets – authors representatin based on gathered data (Car Sales Statistics, 2018)



3.2.2. Potential of new entrants into the industry

Entering the car industry is not done easily because of the deep roots car industry has developed. If anybody wants to enter the competitive environment, they have to have high capital investments in the beginning in order to succeed. The current car demand is not simple and with a brand-new car you need to respond to all of your competition at once. Also, brand loyalty is more present in the car industry than anywhere else. Companies are safeguarding their customers comeback and therefore for new carmakers it is almost impossible to convince customers to switch to something new and untested (AWB, 2016; Uzwysyn, 2012). For example, Tesla, being brand new concept of car mobility with electric vehicles and new safety features, was able to succeed on the market (Zucchi, 2018).

3.2.3. Power of suppliers

Suppliers do not have such a power over the car industry. Car companies can always switch onto another supplier, who will be more open to their demands, like prices. Suppliers' power to bargain is low also because some of the manufactures make

components by themselves. As there is low chance of new competition for car manufacturers, suppliers are always in the danger of new competition (Him, 2007, p. 26). In the opening of the video, which shows, how Škoda Octavia is made from the beginning, we can see, that metal parts are pressed in the factory, limiting the suppliers (ŠkodaHome.cz, 2014).

3.2.4. Power of customers

Customers have a moderate power over the industry. Their usual aim is the lowest price for required model. Bigger power is on the shoulders of companies buying a significant number of cars, where they are able to obtain a deal. Car companies therefore have to aim for a certain amount of balance, profiting from sales but still keeping their customers by making comfortable, safe and efficient products hand in hand with high quality customers service (AWB, 2016). In this industry buyers are price sensitive and before their purchase they educate themselves and any cons on their list might switch their decision-making process. As well it is because of the substitutes on the market, which is vast and differences are small (Wilkinson, 2013). Overall power of customers is therefore high, and the business is not tempting for newcomers and also the profitability might be lower.

3.2.5. Threat of substitute products

This threat is the biggest one for any car manufacturer, because all their rival companies are offering a substitute of almost the same quality, with possibly the same features, just with different logo. Customers are looking not only onto purchase prices, which are the most important for them, but also maintenance as well, and they are more likely to choose a car with a low maintenance price ranges (Lee, 2011). Škoda is one of the cheapest brands possible for maintenance and possible repairs on the Czech market (Dvořák, 2017).

3.2.6. Porter's Five Forces summary

The biggest issue in this analysis is the vivid competition on the market. As it is presented in the graph 5, Škoda has the smallest world sales, but is not participating on the smallest number of markets. That can be explained thanks to the ownership of Volkswagen group whose sails points is Škoda partly using in some countries. This ownership is therefore shown as a great opportunity for Škoda, strengthening their overall position on the world market. Overall the biggest power in the industry lied with substitute products. Customers can easily leave or switch onto another brand, in case any of their required specification is missing in Škoda's product portfolio.

3.3. SWOT analysis

This analysis gives us an opportunity to estimate *strengths*, *weaknesses*, *opportunities* and *threats* which are involved in business or marketing of the company. First two factors are rather internal factors of the analysed company itself the other two are aimed for the outer factors. It is important to focus on key factors in each segment and afterwards evaluate their position. Also, it gives us a picture of what is the strength of the company and which weaknesses should be reduced (Bělohlávek et al., 2006, p. 201).

Figure 3: SWOT analysis of ŠKODA AUTO plc (own source)

Strengths	Weaknesses
Part of Volkswagen group	No possibility to expand to the American market
Strong Czech brand	"Dieselgate"
Tradition	Missing electric vehicles/hybrids
High qualified working force	Growing production affects the working force
Marketing campaigns throughout the country	Possible economic crisis
New generation of cars features	
Lowest prices on the market	
Opportunities	Threats
Clean mobility	Growing prices
Growing production - other markets	Competition on the market
Digitalization	Brexit
New designs	New laws and directives from the EU
	Brand new competing technology

3.3.1. Strengths

From the outsider's point of view, among the strengths of the company on the Czech market is their tradition and inland production, supporting the local economy (AutoSAP, 2018a). Also the high range of products offered to customers, with the lowest prices on the market, and still growing sales (graph 2 and 3) (Car Importers Association, 2009 - 2017; Škoda Auto, 2019). Škoda's profits and dealership is growing also outside of Europe and therefore they are not dependent on one market and the car export numbers are still growing (ŠKODA AUTO a.s., 2019g). The company's work force is highly educated providing the company with quality products (ŠKODA AUTO a.s., n.d.-b).

3.3.2. Weaknesses

To this category fits still missing electric vehicle or hybrid, which nevertheless has no governmental support in the country, but other countries are more open minded in that matter (Czech News Agency, 2019; European Alternative Fuels

Observatory, 2018a). Company's aim of growing production is affecting workers in the company with more working hours, which might lead to inner tense or leaving of qualified workers (Czech News Agency, 2018a). Possible economic crisis would affect the automotive industry the most, because it is prone to changes (European Commission, 2018a; J. Stiglitz, 2009). "Dieselgate" had the negative impact on Škoda's name and therefore any other possible crisis should be averted (Hachenberg, Kiesel, & Schiereck, 2018).

3.3.3. Opportunities

The biggest opportunities lie on the field of clean mobility. The EU aims on not only reduction of emissions but also supports the electro-mobility (European Commission, 2016a). Škoda is slowly taking steps towards that with their "Strategy 2025" (ŠKODA AUTO a.s., 2018b). Growing production offers chances on other markets as well. The overall perception of the market looks positive, even that it is entering a slowdown in economic position (European Commission, 2018a). Škoda is following the electrification concept by which they want to achieve ten electric models by 2022 (ŠKODA AUTO a.s., 2019i). For new products Škoda's marketing team had to be aware of all the possibilities as well as other rival companies (graph 4). For example for the BEV, Škoda is not going to be the only company coming out with it, in 2020, it is also Seat, Fiat and Peugeot (Lovecký, 2019). Consequently, timing is going to be crucial.

Škoda is already active on the European, Russian, Chinese and Indian market (ŠKODA AUTO a.s., 2019g). Another opportunity would be an expansion to the East with possible improvements, different models, or their new electric concept which is probably going to succeed on the Asian market, where electric mobility is experiencing a great expansion (Yang et al., 2017). The American market might be a logical step forward for such relatively successful European company. However, we need to think about the differences the American market represents. However there are several differences between the European and American market also with possible difficulties

while entering the market. One of the possible options would be for Volkswagen to introduce Škoda as one of their own cars and therefore they would not have to build up a trust in customers, which is currently still crumbled by the Dieselgate affair (Turna, 2015).

3.3.4. Threats

The competition in the industry is vivid and there are several biggest players in the industry, competing with Škoda (Car Importers Association, 2017). New laws or regulations unexpectedly coming from the EU or the Czech government might influence the future production. Competitors coming with brand new technology, which might bring a revolution to the industry, like autonomous cars, another possibility of alternative fuels, might mix up the odds. Also, the Volkswagen ownership, which has brought Škoda's sales up, might also show as limiting in some parts of the industry, for example restrictions on the market. Similarly, past failures, such as Dieselgate, should not repeat and should be looked upon more thoroughly by management (Hachenberg et al., 2018).

3.3.5. SWOT analysis summary

From the analysis we can conclude that Škoda is strongly using its position on the market. In the Europe as part of the Volkswagen group and tradition. They were able to stand through the "dieselgate" affair and keep the growth of their annual sales also through the crisis (graph 2). Among the weakness we have situated the possible economic crisis and slowing down of the economy, which might be put also into the threats category, because those are factors vastly unchangeable. The company's only defence is diversification of their sales to other markets.

3.4. Micro-surroundings – analysis of the car industry

In this section the industry itself is going to be analysed for surroundings, such as competing companies offering substitutes for the products (Oxford College of

Marketing, 2014). Car industry is specific in this matter thanks to the special type of product it offers and the possible substitution of them.

3.4.1. Basic characteristics of the sector

Automotive industry has a long-lasting tradition in the Czech Republic, which was slowed down by the communist era and much needed capital from abroad. After the Velvet revolution, when the market reopened again, it was not on the level of any other car company in the world. Škoda was by that time bought by Volkswagen group, which was the much-needed push not only for Škoda itself, but also for the industry itself. The opened borders and economy has allowed companies such as Hyundai Motor Manufacturing Czech or Toyota Peugeot Citroën Automobile Czech enter the production market (HMMC, 2006; TPCA, 2002).

After thirty years, the whole industry made a huge step forward in the overall production supplying also other markets with products. Around 80% of the production heads to other countries in Europe, but also China, Russia and India (AutoSAP, 2018a). This is a good sign for the industry because diversification is lowering the overall risk for businesses, in case of an economic crisis. If one of the markets would lower their consumption the company itself would be affected just partly, compared to being aimed just for one.

Another important role of the industry is the working positions it provides. In 2017 there were over 150 thousand employees solemnly in the automotive industry (Prskavec, 2017). The strategic position of the country should not go without mentioning. The centre of Europe provides many advantages with import and export. Added to it is the membership in the European Union and therefore duty-free export in the Union.

3.4.2. Industry's structure and what is its influence

As it was mentioned before, Škoda is not the only producer in the country, and HMMC with TPCA are taking their rightful place on the market as well. Another factory is Kaipan specialising on racing cars in small annual production (Kaipan, n.d.).

Škoda has factories situated in Mladá Boleslav, Vrchlabí and Kvasiny. Each of them specialises on a different type of car, separating the production. Škoda is also making their original parts, components and is providing services to their customers. Their production spreads also abroad with manufacturing plants in China, India, Russia, but also Slovakia, Ukraine, Kazakhstan and Algeria (ŠKODA AUTO a.s., 2019a). Škoda is nevertheless still expanding and aims higher. Plant in Mladá Boleslav gets new, modern and ecological paint shop hand in hand with higher annual production (ŠKODA AUTO a.s., 2019f).

The industry's influence in the country is the biggest in economy, as well as other parts. There are strong ties with suppliers of tyres, parts and components, as well with independent repair shops all over the country. Transport of final vehicles, marketing, and other segments are supported by them.

3.4.3. Changing forces

The biggest and strongest changing forces in the industry are political and economic changes in the place of sales. Laws and legislatives can completely change the final product; economics can stop the production (European Commission, 2016c). Car industry therefore has to follow trends in each of their selling countries. Another force is gaining new customers on completely new markets or enlarging their current rows by lower prices, new technologies, safety and others. Fashion trends in the industry are also playing a significant role, hand in hand with ecology, electro mobility and new technologies. Adaptability of the company is crucial, with good marketing and action prices.

Economic crisis in Europe in 2009 was not gentle towards the car industry and lower numbers in sales and production were following the decline trend. People are usually saving money and new car is therefore an unaffordable luxury in the period of recession. In that time the good export politics of car factories was necessary to show their stability, and even though numbers decreased, none of them disappeared from the market (Valášková, 2012).

Globalisation of the market is also positive for our companies, being able to export to countries not only neighbouring with the country of origin, but also with economical giants like China (J. E. Stiglitz, 2017). Growing technological capabilities are also important, allowing skill-full workers to teach others abroad, taking know-how to another place. Market of products and services is also influenced by this movement, influencing market trends between countries.

3.4.4. Success factor

Among factors, which are providing such a success for the company on the home market is probably its tradition. A hundred years on the market, renown brand, small prices. People in the country know Škoda's cars usually by experience or on daily encounters on the streets. In the years from 2012 to 2017, Škoda's new cars registration were around 30% each year, making over 400 000 cars in total which are probably still in the use (Car Importers Association, 2017, p. 19). Numbers are definitely talking in Škoda's favour.

It is not probably just the tradition itself, but also the services it provides. It can be low failure rate, or lower fuel consumption. Nevertheless, the personal choices, customers make when picking a car, vary and each can be built on something else than the previous one, so it would be unwise to generalize such a matter (Autotrader, 2016).

However, each car company is doing their best to keep their old customers or persuade competition customers to change their brand, by offering various services – prolonged warranties, special insurances or financial services offered directly from the company and many others. In car industry are many success factors, which are shaping the understanding of a success. With Škoda we can openly say, that in 30 years, after the economics of the country was open to the world, they achieved growth in cars' numbers produced, export growth, new markets successful piercing and also increased rate of their cars. Overall Škoda's steps towards success has been more than successful even with their ups and downs.

3.4.5. Summary of micro-surroundings

Škoda thanks to its specific and large production influences their surroundings by a significant measure. The biggest changing force for them in the surroundings, influencing them, are the governmental decisions. The changes on the economic market are also important, as it was during the Great Recession. During that time the production declined accordingly to the decline in the national economics, though the reaction time was belated (Moore & Mirzaei, 2016).

Conclusions

In the thesis we have talked about environmental aspects affecting the case company, Škoda Auto, and also about the company itself. The educated guess here is, that they successfully read their market position and implemented a strategy for launch of electric cars. This was confirmed by the PESTEL and SWOT analysis. Each of these methods provides us with different approach to the company, the industry and outer factors influencing decisions as well as the production. Škoda's position on the Czech market is strong and it is experiencing a significant growth also on other markets (ŠKODA AUTO a.s., 2019g). The biggest changing forces are in hand of the governments and their decisions, but also the influence in the industry's development should not be overlooked.

From the PESTEL analysis the conclusions are - economic factors in the Czech Republic are in the favour of new products deployment including electric cars. Political factors are however standing contra to this deployment, because of the lacking governmental support (Czech News Agency, 2019). Social and technological factors are staying on high level with the company thanks to their highly educated working forces. Environmental factors are supported by governmental decisions as well as trends in the society, however the prospect of electric cars in the Czech Republic are not good (Ščasný et al., 2019). Legislative factors are the most powerful ones in influencing the company's future decision. The European Union's directives are strict in case of CO₂ emissions, because of its aim for 2030, also changing cars' emissions directly on international level (European Commission, 2016c, 2016d).

In SWOT analysis we concluded that Škoda's position on the Czech market is strong, confirmed by the supply and demand in the country. Those numbers were presented in chapter two. Škoda is the biggest car manufacture in the country with their 61.5% of shares in 2018 (AutoSAP, 2018b). They are reaching the first place even in annual first registrations in the Czech Republic (Car Importers Association, 2017).

Therefore the overall position of the company is strong, diversified, also onto another markets in the Europe and the East (ŠKODA AUTO a.s., 2019g).

Škoda plans to introduce their first electric cars in 2020, upholding their “Strategy 2025” to have up to 10 electrified models by 2025 and also reviling their new “VISION E” study (ŠKODA AUTO a.s., 2018b). Škoda has decided to introduce electric cars in a good time, being well-situated on the market. This move can also help them with their competition, enlarging their own product portfolio. Škoda aims at differences in their battery electric cars, which might prove as a successful factor – longer driving range, quicker charging and other factors (ŠKODA AUTO a.s., 2018b, 2018d). Company’s environmental decisions are probably going to prove successful on the market. However, Škoda has to be aware of possible risks, such as strong substitute products with solid competition and economic uncertainties presented in the industry. Company manufactures 61.9% of the all car production in the Czech Republic (graph 1 and figure 1), which is mostly exported and just 10.5% of their 2018 production was sold on the Czech market (AutoSAP, 2018b).

The probable delay in the BEVs production was possibly caused also by the new technology development. Škoda in their “Vision iV” aims at the 500 kilometres range for their electric car and the charging time should be reduced to 30 minutes (ŠKODA AUTO a.s., 2019h). Those numbers should easily compete with Tesla cars, which range is still slightly higher (Tesla, 2019) but there is no other competition. That seems like more than strategical move by Škoda, because they will offer something extra to their customers, rather than blindly competing with others. Also, the lack of governmental support is forcing them to adapt their strategy for charging, taking this matter into their hands. Škoda is pilot testing mobile charging stations in Prague, but also electrifying their showrooms and sell-points preparing themselves for the electric future (ŠKODA AUTO a.s., 2018d, 2019i).

The company is exploiting all the advantages of their current position for electric cars production. From national support on specific markets, to the current demand. That is done even though the Czech market will be limited by the

governmental support to businesses and local governments (Czech News Agency, 2019).

The competition in the industry in classical, combustion engines', cars is huge, because of possible substitutes on the market. Even though annual sales of Škoda grow, their market coverage is not the biggest (graph 4). Their main opportunity is therefore expanding to other markets, possibly using the Volkswagen's ownership as the advantage.

There were several limitations that had the impact on the work. The biggest of them were just the point of view of only external factors affecting the company excluding other views of the problem. Company's inner practices as well as their documentation might have been a huge asset to the work itself in many ways. Better understanding could have been achieved on the field of electric vehicles, in the sense of why they have delayed their deployment of this technology and in what sense they will differ in order to succeed. This research might have been also helpful in introducing new products which would be better suited for the Czech market.

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