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Direct Sales and Its Impact on Automotive Distribution

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D e c l a r a t i o n o f A u t h e n t i c i t y

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Prague, May 17, 2017

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Abstract:

This master's thesis aims to explore the possible implementation of the direct distribution model within the automotive industry. The goal is to outline the possible distribution strategy, using the direct distribution model, for an auto manufacturer. The theoretical background and cases that are used to describe the practical usage of the model are based on a secondary research. More specific aspects of the distribution model are then based on interviews conducted with professionals from the automotive industry. The proposed distribution strategy consists of combination of several direct distribution models. Different models are used due to the distinct nature of the products, considered in the process of new distribution model design. The implementation would allow the OEM to gain more control over the distribution process and create more efficient distribution system.

Key Words:

Automotive, direct sales, distribution

List of Acronyms

B2B	Business to Business
B2C	Business to Customer
BER	Block Exemption Regulation
BEV	Battery Electric Vehicle
CEO	Chief Executive Officer
CRM	Customer Relationship Management
DC	Direct Current
EC	European Commission
EU	European Union
FCEV	Fuel Cell Electric Vehicle
HEV	Hybrid Electric Vehicle
ICE	Internal Combustion Engine
INDC	Intended National Determined Contribution
IO	Independent Operator
MAP	Minimum Advertised Price
MSRP	Manufacturer Suggested Retail Price
NSC	National Sales Company
OEM	Original Equipment Manufacturer
OTA	Over-the-Air Update
P2P	Peer to Peer
PDI	Pre-delivery Inspection
PHEV	Plug-in Hybrid Electric Vehicle
R&D	Research and Development
REEV	Range Extended Electric Vehicle
RMI	Repair and Maintenance Information
SME	Small and Medium Enterprise
US	United States of America
VIN	Vehicle Identification Number

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Introduction

The automotive industry is currently undergoing a period of significant changes, caused predominantly by the uptake of many new technologies but also changes in customer preferences. Moreover, the incumbent automakers are threatened by the market entry of newcomers from both inside and outside of the automotive industry. The changes within the industry must be reflected in the distribution strategy of automakers. The current distribution system that is used by almost all automakers has not changed significantly since it was implemented many decades ago. The indirect distribution model was designed to suit the needs of the manufacturers many decades ago and does not reflect the new possibilities and challenges offered by new technologies. Although the automotive distribution accounts for about 30 percent of the automotive value chain (Nieuwenhuis, 2015), the distribution draws far less attention and is seldom discussed in public. As an alternative to the currently used indirect distribution model, a model of direct distribution in the context of automotive industry will be discussed in this thesis. Currently, this distribution model is used on a large scale only by Tesla but it is gaining a momentum across the industry, representing a more efficient and potentially profitable alternative to the current setting.

This thesis aims mainly to discuss the direct distribution model in the automotive industry, as an alternative to a traditional indirect distribution model. The main goal is to suggest an optimal distribution strategy, using some variation of the direct distribution model, for the defined original equipment manufacturer. Furthermore, the impact of the direct distribution model will be evaluated both qualitatively and quantitatively. As the automotive distribution in Europe is strongly regulated by the Block Exemption Regulation, the legal limitations and potential contradictions with the current and future regulation will be briefly discussed.

The findings in this thesis will be based on both primary as well as secondary research. Whereas the theoretical background will be described mainly using the secondary research conducted through a thorough literature review of the respective topics, the primary research will be conducted in the form of in-depth interviews with experts from the automotive industry. The aim of the primary research will be primarily to uncover the motivation of automakers to implement the direct distribution model. Furthermore, the

aim is also to identify potential direct distribution models, which offer a wide variety of possible applications.

In the first chapter, the currently used indirect distribution model, used by majority of the automakers, will be described. This will later serve as a base for further discussion. Firstly, the most important regulation with regards to automotive distribution – the Block Exemption Regulation – will be explained. At present, it influences many aspects of the distribution, aiming to liberate the automotive distribution and aftersales market. Furthermore, the role of the three stakeholders in the automotive distribution will be described. The distribution process itself starts even before the vehicle leaves the production line and therefore, the role of an original equipment manufacturer will be explained. Subsequently, the distributor on a particular market is involved, providing the automaker with a specific market knowledge and also managing the dealer network in the particular market. The last stakeholder in the distribution process, the dealer, plays a crucial role, as it is the only customer-facing entity in the whole distribution process. The current distribution system will be then briefly evaluated and main advantages and disadvantages of the current system will be explored.

The second chapter will focus on new trends emerging in the automotive industry and having impact on the current distribution model. These trends are also expected to continue in the future. Firstly, the different types of mobility services will be explained, representing a serious threat not only to the current distribution model but also to the whole automotive industry. Secondly, the potential impact of autonomous vehicles on the distribution will be outlined, as it will strongly influence the whole automotive industry within five to ten years. Furthermore, electric vehicles have an impact not only on the manufacturing of vehicles but also on their distribution, as they allow for new, more efficient solutions due to their relative technical simplicity. The in-car connectivity and related services are gaining a momentum in the automotive industry and the topic of the distribution is very relevant, especially in connection with the current and prospective versions of the Block Exemption Regulation. Findings from this chapter will be summarised to demonstrate the combined implications of the current indirect distribution model.

The direct distribution model represents the alternative to the current distribution system. Theoretical background will be based on the concept of the dual distribution model. This concept will be further demonstrated on several cases both from the automotive industry

as well as from other industries. Some variations of the direct distribution model are currently used by many companies across industries and the most interesting ones, from the perspective of the automotive industry, will be presented in the third chapter.

The fourth chapter will provide a view on the direct distribution from the perspective of experts from the automotive industry. This will be done through in-depth interviews with selected industry experts, who will be interviewed on a series of topics related to direct distribution in the automotive industry. Most importantly, the motivation of auto manufacturers to consider and implement the direct distribution model will be explored. Moreover, several possible models of the direct distribution will be identified. The implementation of the new distribution model would also allow for new sales formats which will be also briefly discussed in this chapter, as they might enable the automaker to create a more efficient and profitable sales network.

The last chapter will suggest an application of the findings from both the primary as well as the secondary research. For the purpose of this thesis, a product portfolio of an automaker will be suggested, mainly based on the findings from previous chapters. For this original equipment manufacturer, an optimal distribution strategy will be outlined, based on the direct distribution model. The suggested strategy will consist of several types of the direct distribution model. The suggested approach will also consider different products, different customer groups and also different distribution channels that an automaker might use to provide their customers with the optimal solution. Finally, the suggested approach will be evaluated on both the qualitative as well as quantitative levels.

1 Distribution in the Automotive Industry

Distribution is an essential part of the automotive industry. Although it accounts for about 30 percent of the automotive value chain, distribution draws far less attention, compared to other aspects of the industry. Today's vehicles are produced in countless combinations, posing an immense challenge on the manufacturers as they sell a variety of occasionally purchased products to customers (Nieuwenhuis, 2015).

To help to identify and specify the automotive market, Kotler's definition of metamarket can be used. Metamarket represents a set of products and services that are in the mind of the customer connected with a specific industry, however, the products and services are spread across several different industries. In the case of the automotive market, the metamarket consist not only of auto manufacturers and dealers, but also of financing and insurance companies, spare parts and accessories manufacturers and sellers, service shops, auto magazines and many others (Kotler & Keller, 2011).

This thesis focuses solely on the automotive distribution, especially the traditional European model of automotive distribution. Although the topic of aftersales will be touched upon a few times within this thesis, the emphasis is on the distribution of new vehicles.

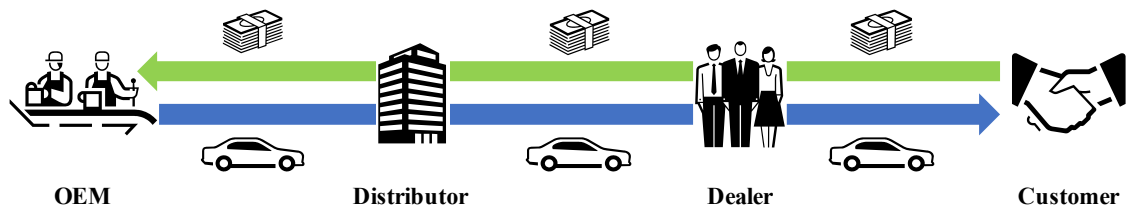
1.1 Current Distribution Model

The traditional distribution model that is currently in place in many European countries has not changed significantly for decades. The distribution system used in Europe today was designed to suit the needs of manufacturers and is now facing severe disruptions due to the effect of several trends emerging in the automotive industry (Nieuwenhuis, 2015). Although there were attempts to apply different distribution models by the manufacturers, such as direct distribution through factory-owned stores, traveling salesmen, wholesalers or retail department stores, the prevailing model has become the one used in today's automotive market (Crane A. D., 2016). The only exception in the automotive industry is the distribution model of Tesla, further described in chapter 3.2.1 (Musk, 2012).

Although each market has its specifics, influenced among others by the national regulation, the general distribution model involves three main players before reaching the customer, as shown in Figure 1. At the beginning of the value chain stands the original equipment manufacturer (OEM), followed by the distributor and dealer network (Roland Berger Strategy Consultants, 2012). There are, however, exceptions to this model,

specific to a certain market or brand. In Germany, Mercedes Benz uses a hybrid model, where some of the outlets are directly owned by the manufacturer and others are privately held. This model has an important impact on the distribution since in the directly owned stores, the OEM is the owner of the stock, whereas in traditional dealerships, the dealer overtakes all the risks (Nieuwenhuis, 2015).

Figure 1 Distribution value chain in the automotive industry



Source: Roland Berger Strategy Consultants, 2012

For the purpose of this thesis, the traditional distribution model will be used. The role of each individual player within the distribution process will be discussed in the next chapters. The purpose is to set the framework for the following chapters and then, based on the effect of the new trends in the automotive industry, to suggest how the distribution model might change in order to cope with the new challenges.

1.1.1 The Block Exemption Regulation

The shape of the current automotive distribution model on markets in the European Union (EU) is strongly influenced by the Block Exemption Regulation (BER), which regulates any type of vertical agreement that may prevent, restrict or distort competition in EU member states. An example of a vertical agreement is e.g. an agreement between a manufacturer and its distributors. The normal mode of relationship between the two entities in a distribution chain with an impact on setting the price or quantity does not interfere with the BER. The BER, however, restricts any type of agreement limiting the supplier or buyer, such as a ban on the buyer not allowing him to buy competing brands. Aside from the negative aspects for the manufacturer mentioned above, preventing him to steer the market situation more directly, the BER has benefits for manufacturers as well. The BER might help the manufacturer to enter new markets or prevents distributors from piggybacking on promotional activities of other distributors (European Commission, 2010). From the perspective of an OEM, the BER is the most limiting regulation, preventing the OEMs from making a radical change towards the direct distribution model. Whereas the OEMs and, more importantly, their legal departments

are sure what the current legislation allows and how to act accordingly, there is a huge amount of ambiguity about the upcoming regulation that is expected to be effective from 2022 onwards (Ernst & Young LLP, 2017).

The vertical agreement and the degree to which it does not comply with the BER is assessed individually, as it is highly dependent on the respective market situation. The respective vertical agreement must fulfil three requirements according to the BER. Firstly, it must comply with five hard-core restrictions listed in the BER. Secondly, a market share cap of 30 percent must be met. Thirdly, the BER states three specific restrictions that must be met within the vertical agreement (European Commission, 2010). These requirements have a major impact on the automotive distribution, as it will be highlighted in the following paragraphs.

The five hard-core restrictions defined by the BER are considered as a severe restriction of the competition on the market and must be met even when the market share of supplier or buyer does not exceed 30 percent as defined in the second requirement. **The first hard-core restriction** regulates the price management, as it forbids the supplier to set a (minimal) price at which distributors can resell the products. **The second hard-core restriction** regulates the territory or the customers to whom the supplier sells the products. Competition must remain on the market and therefore it is not possible to split the overall market based on territory or a certain customer group. The BER also contains an exemption for this restriction as it allows the companies to operate in an exclusive or selective distribution system. **The third and fourth hard-core restrictions** relate to selective distribution. Whereas the selected distributors are prohibited to sell to unauthorised distributors, they cannot be restricted to sell the products to any end-user. Furthermore, the selected distributors cannot be limited by the manufacturer to purchase and resell goods from or to other distributors. **The fifth hard-core restriction** regulates the supply of spare parts. The manufacturer of spare parts cannot restrict the sales of the spare parts either to an individual end customer or to independent repairers and services providers (European Commission, 2010).

The 30 percent market share cap concerns the market shares of both the supplier and the buyer on their respective markets, i.e., the relevant supply or purchase market (European Commission, 2010).

The excluded restrictions concern other restrictions than those specified in the five hard-core restrictions. They restrict the agreement to contain: non-compete obligations during the contract; non-compete obligations after the termination of the contract; the exclusion of specific brands in a selective distributions system (European Commission, 2010).

The first version of the Block Exemption Regulation was approved already in 1999 (European Commission, 1999). The so far latest version of the Block Exemption Regulation came into force in June 2010 and will expire in May 2022 (European Commission, 2010). It is expected that a new, updated BER will follow the current version of the BER (LexGO sprl/bvba, 2016). The proposed version of the regulation, expected to be effective in 2022, will be briefly discussed in a later part of this thesis.

From the perspective of the direct distribution model in the automotive industry, the most limiting factor is the fact that OEMs cannot compete with their own franchise partners, hence dealers, on any level. This implies that if an automaker decided to implement some aspects of the direct distribution model, it would either have to transform the whole current distribution network into a direct one or, alternatively, use a dual distribution model. In the case of the dual distribution model, the automaker would have to create a distinction on some level to ensure that it is not competing with its franchised retailers on any level. Although the dual distribution model works in the case of Apple (described in chapter 3.3.2), it is not possible to implement it under the current setting of the BER, unless a clear product distinction is set. The distinction could be based on different product lines, as it will be discussed in the case of BMW UK in chapter 4.2. In the case of an OEM, one possibility would then be to offer a new direct distribution channel for the new EVs on the market that would not be sold through traditional dealerships (Ernst & Young LLP, 2017).

The current version of the BER has been in place since 2010. In 2022, a new, updated version of the BER will come into force. It is widely expected that the current version of the draft will be amended before entering into force in 2022, but it can be used as a proxy of what might be expected in the final version of the regulation. It is important to highlight some of the most important changes, especially in the area of online selling and aftersales, that might be applicable within the automotive industry once the new regulation is in place.

In general, the aim of the new version of the BER is to liberate the market. This will fundamentally change the way the OEMs do their business in terms of distribution. They will lose control over many aspect of the distribution and aftersales. Although this thesis does not deal with the topic of aftersales in detail, it is important to outline the changes in the proposed BER in the aftersales area. The final version of the BER is expected to be presented around 2020 and until that time, there is a lot of uncertainty on the OEMs agenda (Ernst & Young LLP, 2017).

Firstly, the area of **online sales** within the automotive industry is not specifically regulated under the current version of the BER. The new proposed regulation, however, focuses on this channel. The current version of the BER allows for a clause in the agreement that requires retailers to have at least one brick-and-mortar shop to be able to sell online. The new BER considers this clause to be anti-competitive and therefore aims to remove it for selected goods and services (Ernst & Young LLP, 2017). The removal of this clause would allow for pure online sales of vehicles from third parties, without having a single brick-and-mortar shop. From the perspective of the OEM, this significantly reduces the control over the distribution process (Ernst & Young LLP, 2017).

Furthermore, the new version of the BER focuses on lifting many contractual restrictions present in the current contract with distributors. The general aim is to make online selling easier for distributors. Furthermore, according to the new BER, it may be anti-competitive to prevent a retailer using or bidding on the trademark of certain manufacturers to get a preferential listing on the search engines. Furthermore, the new BER considers the contractual clauses, allowing retailer to sell the products only through selected online marketplaces, as anti-competitive. These limitations must be therefore lifted to ensure fair competition at the marketplace (Ernst & Young LLP, 2017).

Lastly, with regards to both offline and online selling, the new BER focuses on any contractual clauses that might restrict the ability of distributors to set the price of a product independently. According to the new regulation, the distributors would be free to set the price differently for both offline and online sales channels (Ernst & Young LLP, 2017).

With regards to the new BER regulation, a new version of the access to vehicle repair and maintenance information (RMI) regulation was proposed. The RMI is focused on the aftersales business within the automotive distribution to ensure that the OEM will provide RMI not only to their authorised services partners but also to independent operators (IOs).

The aftersales environment has been and will continue to be strongly influenced by the digitisation and connectivity, as described in chapter 2.4, and the proposed version of the RMI is responding to the new trends and outlining key priorities that should be adapted to reflect the changes (Ernst & Young LLP, 2017).

Currently, the OEMs are required to provide the RMI to IOs in a standardised format to ensure that it is not discriminatory compared to the information provided to authorised service providers. Based on the new RMI, a revision of the non-discriminatory clause is needed, as the IOs might need different information than authorised services providers to be able to provide service to their customers. However, before giving the IOs access to vehicle information, a clear distinction between security- and safety-related information must be done, mainly due to the increased role of in-car connectivity. The IOs should be restricted to safety information only (Ernst & Young LLP, 2017).

With regards to the vehicle connectivity, the proposed version of the RMI would require the OEMs to significantly change the scope of information which they must provide to third parties (Ernst & Young LLP, 2017). As it will be described in in chapter 2.4.2, the in-car connectivity is largely driven by the regulation that requires every vehicle to be equipped with an E-Call system. To leverage the high investment that the OEMs had to make in implementing the technology, many automakers created several business models leveraging the in-car connectivity. One of the examples is the so-called predictive maintenance. This system feeds the vehicle information to a selected dealer, who can then proactively contact the customer in the event of a scheduled maintenance or potential breakdown. Due to the new RMI legislation, however, the OEMs would have to allow third parties to access these data. This might significantly reduce the payback time for the legislatively forced investment. Furthermore, the RMI presents other measures that aim to enforce fair market competition. The OEMs would have to enable IOs to look for vehicle parts based on the vehicle identification number (VIN), instead of identifying them one by one (Ernst & Young LLP, 2017).

The new regulation and legislation that will be effective starting in 2022 might still be adapted before entering into force. On the other hand, the direction that the regulators will want to follow is already obvious. Although the regulators' main goal is to liberate new vehicle sales as well as aftersales and hence provide a better quality of service to the end customer, the new regulation puts the automakers in a very difficult and complicated situation.

The approach that will be suggested in the following chapter might not be in full compliance with the current or prospective regulation. The legal implications are out of the scope of this thesis and moreover, it is expected that the proposed BER will be significantly changed before going into force in 2022.

1.1.2 The Role of the OEM in the Automotive Distribution

Manufacturing vehicles and delivering them on the market is subject to a very detailed and complex planning process. The complexity of the planning process is caused mainly by the product complexity itself, very typical for European OEMs, combined with the fact that the production needs to consider vehicles from the order pipeline as well as inventory vehicles. Typically, the sales team of the OEM plans the production some time in advance in collaboration with the distributor, as the expert on the respective market. The overall production plan is then set up by the production planning team in cooperation with the sales planning team. The planning typically runs monthly with the goal of ensuring sufficient allocation of production capacity for a particular market. Although the production is planned well in advance, there is a certain level of flexibility in the plan to allow for later changes (Nieuwenhuis, 2015).

From the perspective of an OEM, sales of new vehicles are split into retail and fleet sales. Fleet customers are usually professional, typically small and medium enterprises (SME's) or large corporates, whereas retail customers are those who buy the vehicle for their own use. This division is crucial for the distribution because the type of customer also determines the sales process for the customer (European Commission, 2010). Whereas private customer and small businesses typically purchase their vehicle through the dealership, medium and large businesses deal directly with the distributor or in some cases with special entity within the OEM structure, dealing with large fleet customers.

Significant investment is required to bring a new model to the market and therefore the manufacturers must ensure sufficient utilisation of production capacities and hence sufficient volumes to be sold. OEMs have a set of tools enabling them to control the market. Most importantly, distributors are offered sales volume discounts for reaching a sales target, eventually resulting in margin erosion for the OEM and, on the other hand, potentially increasing the profit margin for the distributors (Yeung, 2013). Furthermore, OEMs support the sales of vehicles for important fleet clients, such as large fleet tenders.

The role of the OEM covers not only the vehicle production itself. The OEM must ensure the fulfilment of the company strategy in terms of distribution. This is a very broad topic and includes aspects such as planning process, retail formats, potential new revenue stream identification etc.

1.1.3 The Role of the Distributor in the Automotive Distribution

The distributor (called the national sales company [NSC] if the distributor is owned by the manufacturer or importer if it is a privately-owned company) plays an important role in the process of automotive distribution. The difference between a NSC and importer is predominantly in the level of control that the OEM has over the distributor. Where the NSC is owned by the manufacturer, providing the OEM with full control, the importer is privately-owned, offering only a very limited level of control. The distributor generally represents a link between the manufacturer and the respective market. For each brand, there is only one exclusive distributor in every country (Nieuwenhuis, 2015).

The distributor usually has a perfect knowledge of the local market and needs to leverage it to provide the customer with the most relevant product offer. One of its roles therefore consists in following the local regulation and reacting appropriately, e.g. by adapting the product range or price. As an example, the tax regulation concerning vehicle emission can be used. As described in chapter 2.3.2, the regulation differs significantly and it is the role of the importer to reflect this change in the product range. In the case of a high taxation of vehicles with high emission level, the distributor, either NSC or importer, might decide to neglect the model with the most powerful engine, which will most likely be also the one with highest emissions, as the customer demand would not reach necessary volumes. The knowledge of local market is crucial for the success on the market and therefore can be hardly managed from the OEM headquarters, without the local expertise (Nieuwenhuis, 2015).

The product, a specific vehicle model, is also slightly different in different markets. The reason is that the importers are relatively free to specify the different trim level for the vehicle based on their knowledge of the market. Whereas in some markets, the customers are looking for the lowest possible base price, in others they demand a relatively well-equipped vehicle already at the basic trim level. Moreover, the importer is also holding an inventory of stock vehicles and tries to allocate it to individual dealers to avoid having a particular vehicle on stock for an excessively long period of time (Nieuwenhuis, 2015).

This creates a so called *pushability*. The distributor is obliged to reach a certain sales target every month. In order to achieve this, the distributor pushes the vehicles towards the dealers and hence creates oversupply on the market, which further motivates the dealer. For vehicles that are on stock for a longer period than the one agreed with the OEM, the OEM can provide the distributor with a discount. This will allow the distributor to offer the vehicle to dealer for a lower price, making it more attractive for a potential customer (Nieuwenhuis, 2015).

Another important role of the distributor is to manage the dealer network of a particular brand in the country. That involves setting and consequently tracking qualitative as well as quantitative targets for each dealer.

1.1.4 The Role of the Dealer in the Automotive Distribution

The dealer is a privately-owned company which is entitled to sell vehicles of a particular automotive brand and represent the interest of the brand under the terms and conditions of the contract that the dealer must close with the local distributor. Owing to the BER, the owner of the dealership can decide to create a so called multi-brand dealership. In multi-brand dealership, more than one brand of vehicle is sold at the same time, using the same resources, allowing to achieve higher operational efficiency.

The dealer represents the only end-customer facing entity in the whole distribution value chain and therefore, dealers are under constant scrutiny of both distributors and OEMs. To become a dealer, the entity must comply with a tough set of qualitative and quantitative requirements aiming to ensure a constant quality of services across the whole distribution network. The dealer does not have a direct contract with the OEM. The dealer only has a contract with the distributor, as the exclusive distributor for the respective market.

Although the majority of profits of dealers as well as OEMs comes from aftersales services (Oliver Wyman, 2015), new car sales is still a crucial discipline for the dealers. By selling a new vehicle, dealers can generate new leads for the aftersales entities of their business. This is, however, conditioned by the level of service offered to the customer during the purchase process, which is one of the reasons for such strict guidelines concerning quality on the point of sale. Before a new vehicle is handed over to the customer, the vehicle must undergo a set of activities called the Pre-delivery Inspection (PDI). PDI plays an important role in the handover process because without it, the

vehicles cannot be handed over to the customer. PDI involves many activities, such as filling all the necessary liquids and a general check-up of the vehicle (Auto Trader Limited, 2015).

As mentioned above, the dealer is the only end-customer facing entity within the distribution value chain. Therefore, dealers have a direct contact with the customer and collect valuable customer data. This might have not been an issue in the past, since the value of the data in the distribution was not that significant. This is, however, about to change due to the continuous digitisation of the vehicle and the services around it. Suddenly, the customer data value increases rapidly, representing a threat for the OEM, since it does not have a direct access to it.

From the perspective of the distribution, the dealer's role is again closely connected with the demand of the customers, with the dealer being the only end-customer facing entity in the value chain. It is necessary for the dealer to offer the customer a wide range of vehicles available at short delivery times. Since on some markets, especially in the volume-brand segment, customers prefer to get their vehicle faster and hence to choose from the stock vehicles (Nieuwenhuis, 2015), the role of the dealer is to offer suitable vehicles for the customers.

On the contrary, it is not beneficial for the dealer to hold large stocks of vehicles since it is very costly for them, as they are the owners of the vehicle up until the point of the actual transaction with the end-customer. Therefore, dealers must strike the balance between the optimal stock from both the customer and dealer perspective. The majority of dealers, however, use leasing companies to finance their stock vehicles, in most cases with zero interest for a certain period of time, which allows the dealer to get more stock vehicles and operate more effectively (Ross, Westerfield, & Jordan, 2010).

Some manufacturers, with the execution done by the distributors, have piloted and implemented a different approach to dealer stock management. This approach might be demonstrated on the case of the British NSC of Toyota (Nieuwenhuis, 2015), which is ordering and consequently keeping the ownership of the unsold inventory. The dealer can then order only a limited number of display and test vehicles. This gives the dealer more freedom to focus on their core activities. On the other hand, this system is not favourable for the distributors, since they keep a significant amount of cash tied in the unsold inventory stock.

1.2 Pros and Cons of the Current Distribution Model

The current distribution system has been around for decades without any significant change to its structure. Until just recently, most innovations in the automotive industry did not have a major impact on the way vehicles are distributed and sold on individual markets. However, the trends that are currently observed in the automotive industry that will enter it in the coming years, as described in chapter 2, will have a significant impact on the entire automotive value chain, and distribution is no exception.

From the perspective of the OEM, the crucial benefit of indirect distribution is the proximity to the customer that the current setting offers. Thanks to the fact that the dealerships are not owned by the OEM, the number of sales points is much larger than in the case of a direct distribution model. This allows to create a very dense network of dealerships in a market. The density of the market might not play as important role in the future, once the online sales make their way into the automotive industry. Due to the privately-owned dealerships, the current distribution system has significantly lower costs, compared to the hypothetical case of sales locations directly owned by the OEM. Lower costs in this sense represent only the ownership of the physical premises and do not consider the actual cost of the whole distribution system, which is much higher in the case of indirect sales. Indirect distribution also allows the OEM to focus more on its core competencies. Furthermore, since the dealers can operate multi-brand dealerships, combining sales and aftersales of vehicles of different brands, they are able to achieve economies of scale for their operations (Crane D. A., 2014).

On the other hand, the current distribution setting does not allow the OEM to control the final retail price. Hence, significant discounts or sales support is offered to distributors and consequently dealers, leading to erosion of the profit margin. Furthermore, the OEM has only a limited set of tools for managing the location of current and new dealerships, which might lead to a decreased efficiency of the entire sales network. These aspects are regulated under the BER and hence the OEM cannot change these features of distribution using the same distribution model. OEMs may also feel that some of the dealers focus more on a short-term gain instead of following a long-term vision and brand building efforts, which is particularly important for companies introducing innovative products that require strong brand building and product awareness activities (Crane D. A., 2014).

Dealerships are facing a fiercely competitive environment and the industry saw a decline in the average dealer margin recently (McKinsey & Company, 2014). In some cases, the OEM does not know the exact profitability of the dealers. The decline might also be caused by the inaccuracy of the reporting system that OEM uses to get financial and performance data from the dealer network. Some of the dealers do not report the accurate figures to the OEM due to e.g. tax optimisation measures, which might distort the overall performance of the dealer. The decreasing profitability of the dealerships is likely to continue in the future, since the new trends that are approaching the automotive industry have a major impact on several aspects of the current distribution model. As an example, and as will be described in chapter 2.3, electric vehicles require significantly less maintenance than traditional ICE vehicles, which leads to a significant decrease in profitability, since aftersales services represent a major profit pool for dealers.

Moreover, today's customers visit the dealership much less during the purchasing process. Whereas in recent years, customers made up to five dealership visits before making a purchasing decision, today they often go there just once (McKinsey & Company, 2014). Combined with other trends, such as a reduced desire for vehicle ownership or autonomous vehicles, dealers will face major threats in the coming years, unless the current distribution model changes. It simply does not provide enough flexibility to cope with new challenges of the automotive industry.

Furthermore, the current distribution model is not favourable for the OEMs. Firstly, they do not know their customers at this point, since many of them do not even have a CRM system (Tata Consultancy Services Limited, 2013). Moreover, the OEMs do not have a direct access to customer data generated by the connected vehicles. The value of the data will increase rapidly in the coming years, representing a huge business opportunity for the OEMs.

2 New Trends Influencing the Automotive Distribution

The automotive industry is currently undergoing a series of significant changes. The disruptive trends that are quickly approaching are going to cause fundamental changes to every aspect of the industry. This thesis will, however, be focused solely on identifying the key drivers of the changes in the automotive distribution. The automotive distribution is a very complex system that involves several layers and the changing customer preferences will require the OEMs to rethink their value chain. Today, the OEMs profits are mainly driven by after-sales and financial services (Oliver Wyman, 2015).

The McKinsey report (McKinsey & Company, 2016) identifies four key trends that will influence the automotive industry in the next decade. These trends are diverse mobility solutions, autonomous vehicles, electrification and connectivity. These trends have most certainly impacted on the OEMs' distribution system and the impact itself will be examined in more detail in a later part of this thesis. Firstly, the trends will be investigated more closely to understand key drivers, limitations and value proposition for each of the trends.

2.1 Diverse Mobility Solutions

Diverse mobility solutions offer a wide range of potential services that could either complement the ownership of a vehicle or completely replace it. The variety of different mobility business models is truly wide. This chapter will briefly describe some of the most important mobility business models. The key drivers for these business models will be then identified and the possible impact on the automotive distribution will be outlined.

Mobility solutions cover a very wide range of possible business models that can solve some of the customers' mobility needs. At this point, it is worth mentioning the distinction between a customer and consumer. Whereas the customer is typically mentioned within the automotive industry, with the new mobility solutions, the term consumer is often used to highlight the different nature of usage patterns (McKinsey & Company and Amsterdam Roundtable Foundation, 2014). Before identifying the impact of this trend on the automotive distribution, the different types of mobility solutions will be briefly discussed.

Carsharing is the type of mobility that is most commonly mentioned when new mobility services in general are mentioned. The underlying idea is that the consumer is renting the car for a short period of time instead of buying it. This gives the consumer the benefit of a lower cost (in most cases, depending on the usage pattern) and the possibility to choose

from a wide range of available vehicles. Various types of carsharing services exist. A brief overview is described below (Center for Automotive Research, 2016).

Station based carsharing is a model operated by a company (B2C), where shared vehicles are distributed at designated vehicle stations. Vehicles can be picked up at the stations and then returned to the same or different station, based on the service specifications. This puts a limitation on the consumer as he/she is limited with only designated locations. Contrary to station based, the **free float** carsharing model is operated by a company (B2C) and shared vehicles are spread around the designated area and freely float based on the needs of the consumer. The vehicles are usually accessed via a mobile app or a carsharing card at a random location in the designated area. The car can be then returned at any location within the designated area. This solution offers the consumer a significant freedom as the vehicles are not limited to only selected locations (Center for Automotive Research, 2016).

Peer to peer business model represents a counterbalance to the B2C carsharing providers. In this model, the business running this platform serves purely as an intermediary and creates the market for shared vehicles. The vehicles are not owned by a business but by individuals and offered through a P2P platform when not used. Consumers sharing their vehicle can therefore earn extra income, covering the vehicle cost. Consumers renting the vehicles get a relatively cheap access to a wide range of vehicles. Compared to B2C carsharing services, P2P carsharing vehicles are usually rented for a longer period of time (Center for Automotive Research, 2016).

For business customers, **B2B carsharing** represents a mobility solution, potentially replacing their traditional vehicle fleet. Corporate carsharing offers businesses a more convenient and cost-effective alternative to a traditional owned or leased fleet. It gives the business the flexibility in their fleet size, ensures a higher vehicle utilisation and hence saves costs. Corporate carsharing is especially effective in terms of fleet management as all the vehicle management is done by the carsharing provider (Center for Automotive Research, 2016).

Many other business models currently exist on the mobility market. **Ride-hailing** platform connects the passengers with drivers who provide ride for a fee in their private vehicle. Both sides are connected through an app that takes care of the whole process. Among the best-known ride-hailing examples belong Uber or Lyft. Similarly, **ride-**

sharing model connects the driver of a private vehicle with one or more passengers with a common departure and destination location. All the users then share the travel cost. The most successful example of ride-sharing is BlaBlaCar. Ride-sharing is also piloted by Uber with the aim to bring down the cost of the ride (Center for Automotive Research, 2016).

Within the **intermodal travel management** business model, the service provider acts as an aggregator of many transportation providers. The customer is provided with a point to point itinerary combining different means of transportation, such as carsharing, ride-hailing, ridesharing, bikesharing and most importantly also the public transport. The consumer gains a significant level of convenience, since the ticketing and billing is handled through a single account in provider's app. Examples of intermodal travel management companies include German Moovel and Qixxit or Finnish Whim (Center for Automotive Research, 2016).

Various business models are being planned, waiting for the autonomous vehicle technology to reach a market maturity. Once the technology is ready, **shared autonomous vehicle** will be one of the many applications of the autonomous driving technology. The vehicles are freely floating around the designated area, with no human operation, based on the current demand. The business operating the fleet of autonomous taxis is benefiting from the fact that there are no drivers employed, which significantly lowers the costs (Center for Automotive Research, 2016).

2.1.1 Drivers of New Mobility Solutions

The shift from the traditional model of vehicle ownership to mobility as a service is driven by several factors. The aim is to provide the consumer with the most effective means of transport for every possible situation. The most important factor is the changing consumer preferences, especially within the generation Y and Z.

The automotive market is currently observing a trend of **shifting preferences of generations Y and Z**. Whereas previous generations, including the baby boomers and the generation X, incline to the traditional vehicle ownership as their preferred means of mobility, the younger generations tend to seek for more flexible and cost-effective solutions. Especially in the more developed automotive markets, representatives of younger generations are up to three times more likely to abandon their vehicle in exchange for some sort of mobility service (Deloitte, 2014). The younger generation is

not drawn by the actual ownership, as 73 percent would prefer the ownership of a few useful possession instead of many possessions (ACEA, 2016). The trend of the decreased desire for driving can also be described using the decreased number of people among the younger generation holding the drivers licence in the US. The number of young people (16 to 24 years old) holding a driver's licence dropped from 76 percent in 2000 to 71 percent in 2011. On the other hand, the number of people enrolled in various types of carsharing schemes rose by 30 percent annually between 2011 and 2015 (McKinsey & Company, 2016).

Furthermore, the recent rise of mobility services is driven by a continuous **urbanization**. Three quarters of European population currently live in urban areas. Moreover, 64 percent of traveling was made within urban environments (ACEA, 2016). This puts an enormous pressure on the urban infrastructure and results in severe congestion situations in many urban areas. Currently, the congestion is estimated to cost the EU society around one percent of European GDP (ACEA, 2016). Mobility services could therefore solve some of these issues due to a higher transport efficiency or lower overall emissions and costs.

Moreover, the mobility services are driven by the **demographic changes**. By 2025, more than 20 percent of Europeans will be older than 65 years, with an increasingly growing group of people above 80 years. Especially for this generation, the wide spread of accessible mobility services means a way for a more active life even with decreased movability (ACEA, 2016).

2.1.2 Potential Implications for the Distribution Network

The increased use of mobility services among population will gradually lower the need for vehicle ownership. This will cause private vehicle sales to drop by 23 million globally (global sales in 2015 were 87 million units). Due to the higher utilisation of shared vehicles, however, a higher demand for shared vehicles (expected increase of 10 million units) will partially make up for the drop in private vehicle sales (McKinsey & Company, 2016).

The major impact on the current distribution system will therefore not be caused by the drop in the total vehicle demand, but rather by changes in its structure. Whereas currently, private vehicle sales represent about a half of total sales (McKinsey & Company, 2017), this share is about to shrink significantly as more shared vehicles will gradually replace the private vehicles. Since large fleets of vehicles are usually not sold through traditional

dealerships, the decline will be much more obvious at the dealer level. On the other hand, most dealers' revenues originate in aftersales and this revenue stream will not be endangered by the shared vehicles, since more frequent maintenance is expected with the shared vehicles.

2.2 Autonomous Vehicles

Autonomous vehicles are set to completely disrupt the automotive industry. The way that people use their or shared vehicle will be completely changed, since a fully autonomous vehicle does not require any human interaction. More than any new technological trend, the widespread adoption of autonomous vehicles is dependent on the customer acceptance since a fatal crash in the initial adoption phase of the technology might significantly influence the image of the technology for the customers (Boston Consulting Group, 2016). Furthermore, an adaptation of the legal framework regarding the liability in case of an accident needs to be resolved at European as well as national level (SAE International, 2014).

2.2.1 Different Levels of Autonomy

The level of autonomy of a vehicle is determined by the level of human involvement that is needed for safe driving. Globally, there are several scales of autonomous vehicles, however, the most common is the one issued by the Society of Automotive Engineers (SAE International, 2014). Based on this definition, there are six different levels of autonomy of a vehicle.

With **Level 0: No Automation**, the human is required to perform all driving related activities. The human driver could be supported by warning alerts, but they do not take control over the vehicle at any time. With **Level 1: Driver Assistance** some of the driving activities, such as accelerating/decelerating or steering, can be executed by a system using information about the vehicle's environment. The human driver is expected to carry out all the remaining tasks. At **Level 2: Partial Automation**, the system is taking over some of the driver's tasks by employing one or more driver assistance systems, such as accelerating/decelerating and/or steering using the information about the vehicle's environment. The human driver is expected to execute the remaining driving tasks (SAE International, 2014).

Vehicles equipped with technology enabling **Level 3: Conditional Automation** (and higher) are considered to have a certain level of autonomous driving. Driving tasks are

executed by an automated driving system. The driver is expected to react appropriately when requested by the system. Furthermore, with **Level 4: High Automation**, driving tasks are performed by the automated driving system. Even if the driver does not react appropriately to the request made by the driving system, the vehicle is able to continue driving safely. Finally, with **Level 5: Full Automation** the vehicle is fully operated by the automated driving system at all times and under any conditions that can be managed by a human driver. Human interaction is not needed at all (SAE International, 2014).

2.2.2 Drivers of Autonomous Vehicles

The uptake of this new disruptive technology is driven by several key factors influencing the future use of autonomous vehicles (Roland Berger Strategy Consultants GmbH, 2014).

Technological innovation is moving ahead at an increasing speed as many OEMs as well as tech companies are currently developing, testing and piloting advanced driver assistance systems or even fully autonomous systems. This is driven by the recent advancement in technology allowing for safe and affordable autonomous vehicle systems. The further uptake is also pushing down the price of key components, which further accelerates the development and adoption (Roland Berger Strategy Consultants GmbH, 2014).

The automotive industry is currently facing **fierce competition** not only from the incumbents, but also from new tech players. New major revenue streams will emerge as the autonomous technology will reach market readiness, and the OEMs are determined to claim the highest stake possible since the threats and opportunities are high. Being the first on the market will ensure a certain competitive advantage, since autonomous driving brings a high value to the customer, which in turn reduces the value of non-autonomous vehicles. On the other hand, it brings challenges, such as the responsibility for the technology. Accidents or even casualties in the initial product phase might prevent the technology from a further uptake (Roland Berger Strategy Consultants GmbH, 2014).

By definition, the autonomous vehicle will free up significant proportion of people's every day and hence it offers **significant individual benefits**. It is then up to the individual to decide what to do with the extra time. It could be spent by leisure activities, resulting in high potential additional revenues for both OEMs and third parties. On the

other hand, the time might be used more productively (Roland Berger Strategy Consultants GmbH, 2014).

The development and implementation of autonomous vehicles is furthermore driven by the arising **societal benefits** that are related to it. Firstly, immense costs are associated with traffic jams. Only in the US, the costs were estimated at \$121 billion. Secondly, more than 90 percent of all car-related accidents are caused by a human error, which results in more than 1.3 million deaths every year. Autonomous driving can significantly contribute to reducing this number and hence save costs (Roland Berger Strategy Consultants GmbH, 2014).

Governments around the globe recognise the opportunity in the advanced driver assistance systems and are in many cases trying to pave the way for public testing and consequently the implementation of autonomous vehicles.

2.2.3 Potential Implication for the Distribution Network

The potential impacts on the distribution network are immense. It is widely expected that a higher share of autonomous vehicles in the global fleet will gradually lead to a higher share of customers choosing various mobility solutions instead of the traditional vehicle ownership. Since large fleet orders are usually not processed through traditional dealerships, the sales volume might decrease significantly. Moreover, since a large share of dealers' profit comes from aftersales service, the impact on the aftersales business will be crucial for the survival of the dealers. It is expected that due to the lower accident probability of autonomous vehicles, the crash repair cost will drop by up to 90 percent (McKinsey & Company, 2016).

Despite the drop in certain revenue streams, the autonomous vehicle market is still an extremely interesting business opportunity for the OEMs, since it is predicted to reach the market value of \$42 billion by 2025 and even \$72 billion by 2035 (McKinsey & Company, 2016).

2.3 EVs

EVs are currently one of the most discussed topics within the automotive industry. This chapter briefly explains the different types of EVs and the reasons for the current uptake of EVs. Based on these findings, the implications on the current distribution network will be outlined.

2.3.1 Electric Vehicles Typology

Before explaining the individual aspect of e-mobility, it is important to distinguish between different types of electric vehicles (EVs) as there is often confusion about the individual types. When the fuel cell electric vehicles (FCEV) are excluded (since their mass market production is still far away), there are essentially three types of EVs (McKinsey & Company and Amsterdam Roundtable Foundation, 2014):

The basic level of vehicle electrification is represented by the **(plug-in) hybrid electric vehicle (PHEV)**. The vehicle uses a parallel configuration of an internal combustion engine (ICE) together with an electric motor and a small battery pack. The ICE is the primary mover and the electric motor serves as a support or, alternatively, can be used as a primary mover on very limited distances at low speeds. The vehicle might have the option to charge the battery pack from the grid (McKinsey & Company and Amsterdam Roundtable Foundation, 2014).

Furthermore, the **range-extended electric vehicle (REEV)** offers a different technological solution of combining both an electric powertrain and ICE. The vehicle is using a series configuration, where the electric motor serves as the primary mover, taking power from a relatively large battery pack. The ICE serves as a generator of electric power and charges the battery pack. The vehicle is capable of driving purely electric on medium distances. Although the technology is much different from the PHEV, REEVs are mostly considered to be PHEVs (McKinsey & Company and Amsterdam Roundtable Foundation, 2014).

Only the **battery electric vehicle (BEV)** represents a fully electric vehicle. The vehicle is only equipped with an electric motor, taking power from a battery pack. The only way to get extra power is charging the vehicle from the grid. The benefit of this setting is the relative simplicity, which has numerous benefits, such as a limited number of moving parts within the engine, which results in a significantly decreased probability of breakdown (McKinsey & Company and Amsterdam Roundtable Foundation, 2014).

2.3.2 Drivers of Electric Vehicles' Uptake

The uptake of EVs is driven by several factors. The stringent European emission regulation is pushing OEMs to heavily invest in R&D activities related to the development of EVs. Furthermore, the wide spread of EVs was in the past limited by several factors that were not appealing for potential customers. Many of these pain points

are now being solved and their importance is diminishing. Therefore, the wide spread of EVs is expected in the coming years, however, the pace of adoption will vary significantly across different regions, since it is so far significantly dependent on the support of local authorities (McKinsey & Company, 2017).

The key driver for the development and production of EVs on a large scale, at least in the context of the European automotive market, is the **Regulation (EU) No. 333/2014** (European Parliament and the Council, 2009) concerning the reduction of emission from passenger vehicles, effective from 2020 onwards, that was further amended by a further regulation in 2014 (European Parliament and the Council, 2014). The regulation sets very ambitious targets. Whereas the average emission level of a new car sold in Europe in 2015 was 120 g CO₂/km (International Energy Agency, 2016), from 2020 onwards, the 95 g CO₂/km limit will be applicable. That represents a necessary emission reduction of 23 percent over the period of five years. The limits however do not apply on every car sold by an OEM, but on the average emission level of the fleet sold within one year (European Parliament and the Council, 2014).

The limit is, however, not fixed for every OEM, as it can vary based on the limit value curve. To ensure fair market conditions, the limit for individual OEMs is calculated separately, considering the average weight of the vehicle. Since only the average fleet emission is regulated, it is possible for the OEMs to produce vehicles with higher emission levels if they are balanced with lower-emission vehicles to ensure meeting the emission threshold (European Parliament and the Council, 2014).

To enforce the fulfilment of the regulation by OEMs, strict penalties are put in place. From 2020 onwards, when the regulation is effective, the OEMs will be penalised by an excess emission premium of €95 for every g/km of exceedance for each vehicle registered in a particular year (European Parliament and the Council, 2014).

To further incentivise the OEMs to produce low-emission vehicles (below 50 g CO₂/km), so called super credits will be awarded for every low-emission vehicle sold. Every low emitting vehicle can be counted as two in the fleet average in 2020. This benefit will, however, gradually diminish, as in 2021, the low emitting vehicle will be counted only as 1.67 vehicle, and as 1.33 vehicle in 2022. From 2023 onwards, there will be no additional benefits in place (European Parliament and the Council, 2014).

The technological advancement is causing a significant **decrease in the price of the key component** of the electric vehicle, the battery pack. Its price is steadily decreasing every year. In 2010, the average price of a battery pack was around \$1,000/kWh. Due to the production scaling and the technological advancement, the average price dropped to \$227/kWh in 2016, which represents a price decrease of almost 80 percent within only 6 years. The price of the battery pack is expected to further decrease down to \$190/kWh by the end of the decade and, moreover, to hit the \$100/kWh threshold by 2030 (McKinsey & Company, 2017). The aspect of a significant price decrease might have a major impact on the cost of the electric vehicle, as the battery pack alone makes approximately 37 percent of the EV price (Morgan Stanley, 2016).

Furthermore, the battery energy is another important determinant of the range of an EV. The energy density together with the energy consumption of the vehicle determines the weight of the battery needed to achieve given electric range (MIT Electric Vehicle Team, 2008). The density has been significantly increasing in recent years and will further increase in the coming years. Whereas the average battery energy density was at around 200 Wh/kg in 2015, it is predicted to grow up to 500 Wh/kg by 2025 (Goldman Sachs, 2016).

The **elimination of the range anxiety** is the decisive factor for many car buyers. Thanks to the above-mentioned battery technology improvements, the range of electric vehicles is rising rapidly. Between the years 2013 and 2017, the average range of EVs rose by 20–40 percent. The increase in range of electric vehicles is primarily driven by the increased size of the battery packs (McKinsey & Company, 2017).

Although there are various charging options available, such as wireless inductive charging or battery swapping stations, conventional wired charging is still the clear leader (McKinsey & Company and Amsterdam Roundtable Foundation, 2014). A solid coverage of charging infrastructure is another aspect offsetting the range anxiety of potential customers. It is expected that the number of private and public charging points will increase from 2 million in 2016 to more than 12 million in 2020 (McKinsey & Company, 2017). The rapid increase of charging stations will bring more convenience to customers, offsetting one of the major obstacles for the mass deployment of the EVs.

The power output of the charging station is an important determinant of the charging time of the EV. Several levels of charging modes exist, based on the power output they

provide. **Level 1** provides the vehicle with maximum output of 1.9 kW. With level 1 charger, equivalent to an ordinary home socket, the charging would take approximately 12 hours for a 16 kW/h battery pack. Every EV is capable of being charged using this type of charger. **Level 2** charger provides maximum output of 19.2 kW. The charging time will reduce to 3 hours for a battery pack with equal capacity. EVs capable of level 2 charging must have a dedicated on-board charger and a specifically designed battery pack (Hydro-Québec, 2015).

Level 3 (DC charger) charging is more complex than levels 1 and 2 since it requires a designated communication protocol to share critical vehicle data with the charger. It then adapts the charging procedure based on the provided information. The majority of today's vehicles are not capable to leverage the full potential of level 3 charging because of the battery technology limitations. The maximum output is typically set at 62 kW, however, some OEMs, such as Tesla, deploy charging stations with the maximal output of 120 kW, allowing to dramatically reduce the charging time down to 20 minutes for an equivalent battery pack. Moreover, Tesla announced its plan to significantly increase the power output of its charging network, allowing for an even faster EV charging (Hydro-Québec, 2015).

EVs offer a significantly lower running cost compared to the ICE vehicles. Based on the estimate made by International Energy Agency, the running costs of an EV makes up for one fourth up to one fifth of the running cost of an ICE. The total cost of ownership is, however, not lower, primarily due to the high purchasing price of current EVs (International Energy Agency, 2016). That is preventing the mass market deployment of EVs.

McKinsey suggests that the speed of adoption of EVs highly depends on the regulatory push of low-emission vehicles on a local level (McKinsey & Company, 2016). This claim is further supported by the International Energy Agency (International Energy Agency, 2016). The role of individual governments is to create a **motivating incentive scheme for potential buyers**.

Governments around the world are introducing various incentive schemes to support the uptake of electric vehicles. The approach to incentivising customers for a purchase of an EV vary significantly among countries. Most typically, the combination of financial and non-financial benefits is put in place to ease the purchasing decision but also the everyday

life for early customers. A brief description of selected European incentive schemes in various countries is provided in Table 1.

Table 1 Description of selected incentive schemes

Country	Incentive scheme
France	In 2008, France introduced the Bonus/Malus incentive scheme with the aim to incentivise the purchase of low-emission vehicles. The system (emission thresholds, fees or incentives) was adapted several times to reflect the market changes. Currently, the total incentive for a purchase of a BEV can reach up to €10,000 when combined with a diesel-engine car scrapping bonus. On the hand, the fee of €10,000 is imposed on the purchase of a vehicle emitting more than 191 g CO ₂ /km.
Germany	Germany started relatively late with financial incentives motivating for the purchase of BEV or PHEV. Starting in 2016, BEV customers are entitled to an incentive of €4,000, whereas PHEV customer are eligible for an €3,000 incentive.
Netherlands	In the Netherlands, the Bijtelling system determines the taxation level based on the level of CO ₂ emission. In 2016, BEVs are exempt from the registration tax, and other vehicles are taxed based on five separate tax categories, ranging from €6 for PHEVs with emissions below 80 g CO ₂ /km up to €476 for vehicles emitting more than 174 g CO ₂ /km.
Norway	Norway based its policy on the “polluter pays” principle, meaning that the total cost of ownership of a low-emission vehicle should have the cost of a similar ICE vehicle. Therefore, BEV and PHEV owners benefit from a rich system of financial and non-financial incentives. BEVs are exempt from the purchase tax and are also applicable for a 25 percent reduction in VAT. The non-financial benefits consist of free public charging, designated parking spots in the city centres, permission to use bus/taxi lanes etc.

Source: Ministère de l'environnement, 2017; Verband der Automobilindustrie, 2016; International Energy Agency, 2016; The Norwegian Electric Vehicle Association, 2016

2.3.3 Potential Implications for the Distribution Network

The EVs put a pressure on the current distribution model of traditional OEMs. As mentioned above, the EVs' drivetrain is a relatively simple machine that has just a few moving parts in it. Due to this fact, the probability of breakdown dramatically decreases compared to the traditional ICE vehicle. That poses a significant threat to the OEMs and consequently dealers, whose revenue streams are driven by the revenues from aftersales.

EVs are expected to have a maintenance spending lower by 20–30 percent compared to conventional ICE vehicles (McKinsey & Company, 2016).

Whereas traditional ICE vehicles must undergo the PDI, the EVs can undergo, due to their relative technical simplicity, the PDI using an over-the-air update (OTA). This would mean that the EV would not have to go through a dealership before being delivered to the customer and might be delivered directly to the customer.

OEMs will try to look for new business opportunities and possible revenue streams to substitute for the drop in aftersales revenues. Most of the e-mobility-related potential revenue streams collide with current interests of energy providers. To minimise the revenue drop caused by e-mobility, OEMs might set up a new business in the area of EV charging, demand side electricity management or home energy storage with the use of used battery packs from EVs (McKinsey & Company and Amsterdam Roundtable Foundation, 2014).

2.4 Connectivity

Connectivity is a subset of the topic digitisation. Digitisation is a very broad term, spanning across all industries today, as they are all looking for a way to streamline their business process and create new value proposition for their customers. Digitisation within the automotive industry is also spanned across the whole value chain, however, this thesis focuses mainly on the subsection of digitisation that directly affects the current distribution system and most importantly customers, hence connectivity and related business models that are enabled by the in-car connectivity.

2.4.1 Description

New services extending the capabilities of the current **infotainment system** are appearing. Thanks to the improved broadband coverage and technological advancement in other related areas, the scope of services available within the infotainment system is increasing rapidly. A group of services will aim to improve the customer experience in relation with the navigation system, such as the use of Google Maps including the Street View service and increased POI integration in the navigation system, allowing businesses to promote themselves within the navigation system. Furthermore, the navigation systems are to connect with social networks and news portals to deliver to the customer the most up-to-date information (PwC, 2016).

The in-car connectivity allows also for a **remote control of the vehicle**. The communication can occur either between the vehicle and its owner or even between the vehicle and third parties. The customer could control selected vehicle functions, such as locking and unlocking the vehicle, turning lights on or turning air-condition on, through his/her smartphone. This technology might however create a new service related to the vehicle. DHL, for example, is planning to offer in-car delivery to their customers. The customer would just grant a one-time permission to unlock the vehicle and let the courier deliver the package. From the OEM and dealer perspective, other groups of services, such as the proactive maintenance, are appealing. Even before the service interval is about to signal the need for a regular maintenance, the vehicle will contact the dealer itself and inform him about its needs. It is up to the dealer then to contact the customer and set up a service appointment (McKinsey & Company, 2014).

Enhanced in-car connectivity together with an extremely high product complexity of today's vehicles drives the other upcoming trend, which are the **features on demand**. In order to save significant manufacturing costs, the OEMs will pursue a product complexity reduction. This means that they would like to offer more standardised vehicles to customers. Each customer, on the other hand, has different preferences when it comes to the features of the vehicle. The aim is therefore to manufacture very similar products with identical features, but lock their usage with software. A great example to demonstrate this trend are heated seats. Instead of producing several types of seats, the OEM would produce only one that would include the technology allowing to heat the seats. The customer might not need heated seats throughout the whole year, but would appreciate this feature during winter time. At this point, he/she will be willing to pay premium for such service, even for a "subscription" of a heated seat (PwC, 2016).

A large group of additional services aim to increase **customer convenience**. A typical example of such service is smart parking. Smart parking allows the vehicle to easily locate a parking spot and navigate the driver towards it. The smart parking concept consists of two main subgroups. One group involves parking on the street and public roads, which is called on-street parking. On the other hand, parking in private parking houses, garages or parking lots is called off-street parking. The convenience of smart parking lies in navigating the driver towards the parking spot, in some cases the opportunity to book the parking spot and, ideally, even pay for the service using cashless payment options (McKinsey & Company and Amsterdam Roundtable Foundation, 2014).

Contactless payments are another significant subsection of the convenience services. They will allow the driver to make payments for gas, food, toll and others without the need for payments with cash or credit cards (PwC, 2016).

2.4.2 Drivers of Digitisation and Connectivity

The in-car connectivity is largely driven by changing customer needs, as described above, but more importantly, by the European regulation (European Parliament and the Council, 2015). The regulation (EU) No. 2015/718 requires all OEMs to include the so-called E-Call system in every new vehicle, starting in April 2018. The E-Call system allows the vehicle to provide emergency services with an exact location and further information in the event of an accident or a breakdown. This system aims to improve the quality of the emergency services thanks to more information provided about the accident, such as the vehicle's exact location, speed, number of passengers etc. Due to the precise vehicle location in time of the accident, the emergency services can provide assistance in a much shorter timeframe (European Commission, 2015).

This regulation obviously requires the vehicle to be connected to the internet at any time and hence forces the OEMs to install the connectivity unit in vehicles. The OEMs then try to leverage on this fact and build as many additional services as possible to make up for the increased cost.

2.4.3 Potential Implications for the Distribution Network

In-car connectivity has its significant implications for the distribution network, similarly as other trends. The most significant impacts are legal, including the agreement framework among individual entities along the distribution value chain. The arising question that needs to be solved by the OEMs is the data ownership, as the connected vehicles will collect an immense amount of data. Currently, the dealer is the only customer-facing entity along the distribution value chain and hence would be entitled to own the customer data. This is, however, not favourable for the OEMs.

Since dealers are the ones who essentially sell the vehicle, they need to understand its benefits for their business and leverage all the possible opportunities. There is a high potential for recurrent revenues, since the vehicle will contact the dealership in the event of a breakdown or regular maintenance need (PwC, 2016).

2.5 Combined Implications of New Trends on the Automotive Distribution

The new trends are set to change the current automotive distribution model completely. Due to the simultaneous effect of several trends, it is very hard to predict the implications for the distribution. This is, however, the main driver for OEMs to innovate the distribution process. The level of uncertainty and unpredictability in the automotive is increasingly high and OEMs need to be prepared to tackle the new challenges.

Besides the uncertainty, the major impact on the current distribution is the decrease in profitability of the dealer network in the recent years. This trend is expected to continue under the current setting. Furthermore, the effect of electric vehicles, with their reduced need for maintenance, will also have a negative impact on the dealers' profitability. Moreover, due to the uptake of mobility services, which is expected in the coming years, the need for vehicle ownership will slowly decrease, resulting in lower sales for the dealer network mainly due to the fact that shared vehicles will be purchased in large fleets outside of the dealer network. Another driver of the profitability decrease will be the uptake of autonomous vehicles. It is expected that autonomous vehicles will dramatically decrease the need for crash repairs, which will eventually significantly influence the business of dealers and affect their major revenue stream. Furthermore, some of the new trends have major legal implications on the current distribution model. Especially the connectivity poses an immense challenge for the OEMs, as at this point, the dealer would be the owner of the customer data, and the contract therefore needs to be changed in order to allow the OEMs to access to the data.

On the other hand, these trends also bring some opportunities that might have a positive impact on the distribution network. The most significant impact is brought about by the increase in shared vehicles. Shared vehicles will have a much higher utilisation resulting in a faster wear and tear. This will increase the need for a regular maintenance, supporting the main revenue stream of the current distribution network. Furthermore, the dealers might embrace the new trends and try to leverage them in their favour. The dealer might, for example, become a one-stop shop for an energy solution that would serve as an add-on service with a purchase of an electric vehicle. Together with the vehicle, the customer might purchase solar panels for his/her home together with a battery system to store the energy. In some cases, the OEM might even become an energy provider and the dealer could get a commission for a new contract.

Overall, the role of the dealer is changing significantly, regardless of the type of distribution. Dealers will gradually sell fewer new vehicles due to the effect of mobility services. This will, on the other hand, bring them new revenues due to the increased need for maintenance of these vehicles. Furthermore, they might get new revenue from additional services with regards to mobility services or electric vehicles. The main limitation might be the unwillingness of dealers to accept new technologies and embrace changes. They might not be keen on promoting new products and services, which would pose a threat to OEMs, as the customer acceptance of these new technologies will be crucial for their future existence.

3 Direct Sales

Marketing theory generally refers to direct selling as a form of sales where the sales representatives contact the potential customer directly, in most cases face to face (Kotler & Keller, 2011). In the automotive industry, however, direct sales refer to a deviation from a traditional distribution model towards a system that is fully controlled by the OEM. Often, direct sales in the context of the automotive industry are mentioned with regards to online sales, which represents only a fraction of the whole concept of direct sales in the automotive distribution. The topic of online sales in the context of automotive industry will be discussed separately in chapter 4.4. Moreover, online sales can still be part of the traditional indirect distribution model, as will be described in chapter 3.2.2.

Distribution strategy must be in line with the overall business strategy of the company. It is very important, as it is the distribution that captures the value and monetises it. Based on Michael Porter's theory, strategy is about being different and in the long-run, only those companies with a significant competitive advantage will succeed. Therefore, it is necessary to create a distinct business model, allowing the company to deliver a value to the customer. It is then up to the company to have enough capabilities to monetise this and capture the value from customers (Matzler, Bailom, von der Eichen, & Kohler, 2013). The creation of a competitive advantage consists of four areas that a company needs to perfect (see Figure 2). Firstly, the company's resources are **valuable** if they enable the company to implement a strategy that improves their efficiency and effectiveness. Secondly, the resources are considered as **rare** if the resources are only in the hands of few companies. Thirdly, the resources are **imperfectly imitable** thanks to specific historical conditions or e.g. social complexity. Lastly, the resources are considered **organisation specific** if there are no strategically equivalent, valuable and rare resources (Brem, Maier, & Wimschneider, 2016). A carefully designed distribution strategy, leveraging all the core competencies, might be the source of a distinct competitive advantage.

Figure 2 Creation of competitive advantage



Source: Brem, Maier, & Wimschneider, 2016

Although there are more possible solutions of executing the idea of direct sales, the core of the concept remains the same. This chapter aims to present direct sales as an alternative to the traditional distribution model currently used in the automotive industry. Firstly, a theoretical framework of potential direct distribution implementation through a dual distribution system will be presented. Furthermore, the model will be described using examples of direct sales from the automotive industry and examples from other industries. The topic of online sales within the automotive industry will be discussed separately (chapter 4.4), as it is not necessarily related to direct distribution. The theoretical framework and the cases from both the automotive and other industries will be complemented by the findings from the primary research in chapter 4 and furthermore implemented in chapter 5.

3.1 Dual Distribution Model

This chapter aims to describe the model of dual distribution in more depth and suggest its possible implications for the automotive industry. Dual distribution generally means the coexistence of both independent and manufacturer-owned retailers within its distribution network (Rosen, Gunkel, & Schlaegel, 2014). When an OEM considers a direct distribution model, at least for certain sales channels, dual distribution model represents a meaningful alternative, considering the investment in the current distribution network in the past decades. This model will be later demonstrated at the example of Apple (chapter 3.3.2), which uses this distribution system successfully. In the automotive distribution system, the dual distribution system has not been used until recently. Also, in the context of the automotive industry, the retailers are not necessarily owned by the OEM, whereas they could be owned and managed through the distributor in the respective market. The BER, as described in chapter 1.1.1, has a strong influence on the current design of automotive distribution systems and the dual distribution concept might not be in full compliance with it. To explain and understand the concept of dual distribution, the legal impact will be neglected, also considering the uncertainty with regards to the new version of the , expected to be put in place by 2022. This will allow to investigate the possible benefits and synergies of using a dual distribution system, as well as its drawbacks.

Companies might tend to implement the dual distribution strategy for several reasons. Firstly, the transaction costs of an independent retailer are higher than in the case of manufacturer-owned retailers. Moreover, conflicts of interests are generally solved better

in a more hierarchical organisation and more efficient decision-making processes can be implemented. Also, the behavioural uncertainty with regards to independent retailers is significantly higher than in the case of manufacturer-owned retailers. All of the above-mentioned reasons provide the manufacturer with a higher degree of control in the distribution value chain (Rosen, Gunkel, & Schlaegel, 2014).

Although it might not seem logical to employ different types of retailers in one network, the dual distribution strategy identifies a synergy effect in having both independent and manufacturer-owned retailers in the distribution system. Automotive markets differ widely among countries, owing to the local specifics, which creates a high level of uncertainty for the manufacturers. Uncertainty in the customer demand then increases the transaction cost for the manufacturer. By spreading the uncertainty among individual independent retailers, the transaction cost can be reduced (Rosen, Gunkel, & Schlaegel, 2014).

Furthermore, the dual distribution concept enables the manufacturer to manage the market network coverage. When entering a new market, or, on the other hand, where there is a low market coverage on an existing one, the manufacturer-owned retailers can support the uptake through their own presence. On the other hand, the manufacturer might increase the barriers for entry and hence decrease the attractiveness of a particular location through investment into new retailers in that area. The main reason for the implementation of the dual distribution model is therefore the complementary nature of the relationship between the manufacturer-owned and independent retailers. Furthermore, it is likely that it would improve the quality of service provided at the individual retailers and hence improve the overall customer satisfaction of the brand (Rosen, Gunkel, & Schlaegel, 2014).

The implementation of the dual distribution model might, on the other hand, cause an increased number of horizontal conflicts resulting from the competition between independent and manufacturer-owned retailers. The independent retailers might fear losing their business to the manufacturer-owned retailers. This might be partially solved thanks to the nature of manufacturer-owned retailers. They would not compete on price since it is not in their interest to undercut the prices and hence reduce the profit margins for the manufacturer. Instead, the manufacturer-owned retailers would focus on increasing sales and brand image through branding and communication activities, which

would consequently help also the independent retailers (Rosen, Gunkel, & Schlaegel, 2014).

In conclusion, the dual distribution system might be positive for the manufacturers for various reasons. Firstly, the level of service at individual retailers would improve, as the independent ones would try to get on par with the manufacturer-owned retailers, which would be under scrutiny of the manufacturer. If appropriate tools are implemented, the inter-organisational knowledge transfer might help to further increase the level of service offered at the distributors. From a strategy point of view, however, the most significant benefit for the manufacturer might be the ability to pilot a new retail concept or introduce new and innovative products or services, using its own distributors. Also, it provides the manufacturer with a significant level of control over the distribution network (Rosen, Gunkel, & Schlaegel, 2014). Furthermore, the dual distribution model would have to be investigated thoroughly from a legal perspective to ensure a full compliance with the current and upcoming BER.

3.2 Direct Sales in the Context of Automotive Industry

3.2.1 The Case of Tesla Motors

Tesla Motors was among the first companies which put direct sales in the automotive industry in practice. Tesla is currently using the pure direct distribution model described in chapter 4.2. The introduction of a new, innovative product on the market might require also a new distribution strategy to deal with the fierce competition from the incumbent companies (Crane A. D., 2016). While introducing direct sales, Tesla could leverage the benefit of starting from scratch and could design a distribution system to perfectly fit their business model. From the perspective of an incumbent OEM, this seems to be the biggest competitive advantage of newcomers on the market.

Prior to entering the automotive market, Tesla announced the intention of using a company-owned distribution network instead of the traditional privately-owned dealership network. The network would consist of a mix of company stores, sales galleries and service centres accompanied by an online sales channel. This announcement was backed by several reasons outlining Tesla's distribution strategy. In this announcement, Tesla already stated that building up a traditional indirect distribution would be much easier, less costly and would be built very rapidly. Despite these negatives, the direct distribution model was implemented (Musk, 2012).

One of the reasons why Tesla has decided to implement direct sales in their distribution strategy was the fact that the majority of customers make a purchasing decision even before entering the physical dealership (Musk, 2012). This fact can be supported by the decreasing number of visits per a vehicle purchase. Whereas in recent years, customers made up to five dealership visits before making a purchasing decision, today they often go there just once (McKinsey & Company, 2014). Closing a deal would then be just a formality and the purchasing process would be shortened to a mere price negotiation and closure of the deal. For that reason, Tesla decided to place their stores and sales galleries in city centres and favourite shopping areas, locations with high foot traffic. Being able to reach the customers at such locations would enable Tesla to attract potential customers before they make the purchasing decision. This would give the company a chance to convince the customer of the benefits of electric vehicles and Tesla particularly. Moreover, Tesla does not employ sales people in its stores and instead uses a product specialist to help potential customers make the right decision, but not push for sales. The remuneration scheme of the product specialist is not based on the number of sales or leads the individuals make. This might slightly decrease the sales in the short-term but is supposed to increase customer satisfaction in the long-term (Musk, 2012).

Another reason why Tesla eventually decided to go with the direct distribution was the aspect of the control over the distribution network. Tesla's vehicles are very innovative, equipped with many new technologies, and since they are fully electric, they are eligible for state incentives and supporting schemes in many countries. The reason why Tesla decided to implement direct sales because is because it believed that traditional dealers are not able to provide the same level of services to the potential customers (Musk, 2012). The new disruptive product, such as Tesla's vehicles needs to prove itself at the market before gaining commercial success. Tesla's management feared that dealers would not have enough incentives to sell the new brand, as it might cannibalise the sales of other, more profitable brands in the dealership. This would result in a conflict of interest for the dealers. Another aspect was also the lack of knowledge that many dealers have in terms of electric vehicle and the environment around it, such as the national incentive schemes, charging technology and infrastructure and other EV specifics (Crane D. A., 2014).

This proved to be true in the report of customer experience during a purchase of an electric vehicle in the US. This report highlights especially the lack of technical knowledge, combined with an often-missing explanation of the incentive scheme in the respective

state. Many of the dealers also generally despised EVs, which resulted in an unfavourable location of the vehicle at the dealership and a low willingness to conduct a test drive with the electric vehicle (Sierra Club National, 2016).

Tesla also pioneered online sales within the automotive industry. Although there are some cases of online sales in the automotive industry, most of the OEMs have used them as a marketing tool for special offers or product launches. For Tesla, the online sales channel is the main source of new orders and therefore the shopping experience needs to be as pleasant as possible. Once the configuration of the vehicle is done, Tesla offers the customer the closest similar model that is on stock to shorten the delivery time. After deciding on the vehicle, the customer can also choose the preferred financing option (Tesla, 2017). In some countries, Tesla offers its customers the option to insure the car through the configurator as well. This is done in cooperation with local insurance companies. Customer can get a favourable insurance offer which reflects the fact that Tesla vehicles are equipped with an advanced driver assistance system that significantly reduces the probability of a crash (Muoio, 2017).

Implementing direct sales means abandoning the traditional distribution model. As the distribution is regulated by many laws and regulation, any diversion from the traditional model might potentially be against some of the rules. Tesla argues that opening their own stores fully complies with all the regulations, as they have not granted a franchise to any dealer and hence do not compete with anyone. Tesla's business model is currently subject to many legal disputes as some of the dealer groups in the US filed lawsuits against Tesla, accusing it of unfair competition (Musk, 2012). Interestingly, the automaker GM accused Tesla of gaining a significant competitive advantage by implementing direct sales distribution (Crane D. A., 2014). This claim suggests that even incumbents such as GM considers direct sales as a more effective way of vehicle distribution.

3.2.2 The Case of BMW UK

The case of German OEM BMW and its British distributor BMW UK serves as an example of online sales in the automotive industry. Except for Tesla, not many other automakers have implemented online sales in their distribution. Before describing the case, it is important to notice that online sales do not necessarily mean that the OEM is selling its vehicles directly. The topic of online sales in the automotive industry will be discussed separately in chapter 4.4. In this case, the online store is an effort of the local

distributor, BMW UK. BMW UK decided to follow this path mainly due to the BER, as at the current state, it does not allow for direct online selling, since the OEM cannot compete with its dealer network on any level (Ernst & Young LLP, 2017). BMW UK provides the technology and generates the leads, but the customer is then redirected to a dealer based on his/her selection to finalise the sale. Although BMW did not confirm expanding online sales into other countries, it can be assumed that this serves as a pilot project for a potential expansion (BMW UK, 2017).

BMW reflects the current trends in the automotive industry, mainly the decreasing number of visits of prospective customers to the physical dealership, the ever-increasing number of people who research their desired vehicle prior a dealer-visit and the fact that nearly a half of the customers would be willing to purchase their vehicle online (BMW Group, 2015). From the perspective of automotive distribution, the mode of cooperation between the distributor is very interesting. This setting also seems to be preferable for other OEMs, since it is not very radical and enables leveraging the current distribution network. To understand the mode of cooperation between the distributor and dealers, the customer journey will be described in the following paragraphs. Some of the aspects of this setting will be used later in the chapter concerning the proposal of a possible distribution model for an OEM.

Firstly, the customer is asked to configure his/her desired vehicle. Throughout the configuration process, the customer is offered help, using the BMW Genius Chat. Once the configuration of the vehicle is finished, the customer is asked to choose his/her preferred dealer, who will take over the purchasing process and handle the customer. Furthermore, the customer is informed about the estimated delivery time of the particular vehicle and at the same time he/she is offered an alternative vehicle from the inventory of BMW UK that matches the configuration the most. This option dramatically reduces the delivery time and helps the distributor manage its stock more efficiently (BMW UK, 2017).

In the next step, the prospective customer is asked to select the preferred means of financing for the vehicle. At this point, the customer can choose either the no-financing option or choose from a range of financial products that are currently offered. Due to the current regulation, a price negotiation step is required and therefore the customer can negotiate the price with the dealer that was selected at the beginning of the purchasing process. In the next phase, the customer fills out his/her personal detail to create his/her

MyBMW Account. There is also an option to fill out details about the customer's current vehicle to get an independent trade-in value. Once the negotiation process is complete, the order can be finalised. Based on the available information, the customer is not required to sign the contract, since he/she has already put down the deposit. All the remaining paperwork will be then finalised during the handover of the vehicle at the pre-selected dealership (BMW UK, 2017).

The approach of BMW UK has several advantages. Firstly, for this model, BMW UK is using the current dealer network and therefore, it does not require any dramatic changes to the current setting. BMW UK did not have to restructure the whole distribution system to create a direct distribution model. Instead, this project could serve as a pilot project to test if customers are interested in purchasing vehicles online. Secondly, BMW UK is entering in a direct contact with their customers, which allows them to create a solid CRM database and understand their customers better. Thirdly, thanks to the fact that BMW UK is the first OEM online store in the country, it can capture a specific segment of customers who despise the traditional way of buying a vehicle.

On the other hand, there is a major disadvantage with the approach of BMW UK. Although it is very favourable to the customer, it significantly reduces the profit margins for the current dealer network. Whereas usually, the customer would need to visit several dealerships and then compare the offers, now the customer might compare the offers from various dealers within a few clicks. That is dragging the prices down.

3.3 Direct Sales in Other Industries

The direct sales distribution model is not specific for the automotive industry. Various companies across different industries have already implemented the direct distribution model. This chapter aims to describe some of the approaches towards direct distribution of companies from different industries. One of the examples is Nespresso. Nespresso could achieve its success thanks to its corporate strategy and unique distribution model that was unprecedented among its competitors. Furthermore, the example of Apple will be examined. Apple uses a combination of company-owned retail stores, online store and a network of partners selling their products. The findings from this chapter will be then used in chapter 5, where the optimal distribution strategy for the automotive industry will be formulated.

3.3.1 The Case of Nespresso

The company Nespresso is famous for its unique business model in the food and beverage industry, specifically for its coffee machines and capsules. The daughter company of the Switzerland-based Nestlé has achieved a significant success in the past years mainly due to the uniqueness of its business model. A major part of the success of Nespresso can be attributed also to its distribution strategy, which is very distinct from its competitors, as it uses a pure direct distribution model. Similarly as in the case of Tesla, Nespresso owns all of its stores to be able to control not only the price, but, more importantly, the customer contact, going directly against the incumbent competition in the respective markets. Another similarity with the Tesla model is the fact that Nespresso was also building its distribution network from scratch, as it previously did not use a network of franchised dealers.

The distribution model is built around the concept of customisation which underpins the business model of Nespresso (Matzler, Bailom, von der Eichen, & Kohler, 2013). To be able to tailor the offer to individual customers, a solid CRM system was implemented. This put a base for building a Nespresso Club, which helped to build a loyal customer base and further work with it. A very important success factor of Nespresso is the word-of-mouth and the company therefore needs to foster customer relationships. Nespresso's emphasis on customer services can also be illustrated by the share of employees dedicated to customer experience. Out of 9,500 employees worldwide, more than 70 percent of them works in direct customer contact. To ensure the same level of service across platforms, Nespresso, unlike any of its competitors, sells its products through a fully-owned distribution network. The main reason for the direct distribution model is the control over the whole process and direct contact with the customer. The distribution strategy consists of three main pillars: boutique stores, online shop and phone line (Brem, Maier, & Wimschneider, 2016). To highlight the importance of each individual pillar of the distribution strategy, a revenue split is used. Whereas 50 percent of the company's revenues come from the online store, 30 percent of revenues are generated in retail boutiques and 20 percent through the call centre (Khamis, 2012).

Nespresso positions itself as everyday luxury (Khamis, 2012), in terms of the respective segment, the retail experience must match and possibly exceed the expectation of the customers. This might not be achievable through a traditional indirect distribution model. Therefore, Nespresso has developed a network of boutiques, usually located in close

distance from luxury brands, such as Louis Vuitton, Hermès etc. as a part of its corporate branding strategy. Alternatively, the boutiques can be found in premium shopping malls across the world (Brem, Maier, & Wimschneider, 2016). The boutiques play three main roles from the company perspective: showcase the Nespresso brand and lifestyle, allow club members to buy capsules and, lastly, to provide an exceptional customer experience (Khamis, 2012).

Nespresso also puts a pressure on the online distribution channel as it contributes with about 50 percent of the total sales of the company. With more than 10 million online subscribers worldwide, Nespresso has a solid customer base for its marketing activities (Doorneweert, 2017). Club members get access to a specialised magazine, are notified about the latest products and are offered the possibility to use a “breakdown service” and borrow a replacement coffee machine while theirs is being repaired (Tungate, 2014). Customers can then place their order of coffee capsules or machines online and choose either a home delivery or pick the order at one of the boutiques (Nespresso Club, 2017). This seamlessly connect multiple possible formats into one united solution for the customer.

Lastly, customers can use the Nespresso Call centre if they need assistance with choosing the most suitable coffee capsules or machines and to place orders. Whereas the majority of competitors only have an info line with limited product information and limited operation time, the Nespresso Customer Care can be reached 24/7 to provide customers with premium services even on the phone (Tungate, 2014).

The business model of Nespresso shows that the pure direct distribution model can be sustainable only for a very specific, premium product or very distinct target group. Moreover, it requires effort to combine multiple sales channels into one solution that allows a seamless transition between channels. Even though it is relatively affordable, Nespresso is still “the most expensive coffee in the world” (Brem, Maier, & Wimschneider, 2016). The arising question is whether the business would be successful without such a unique distribution model. If more intermediaries should be involved in the distribution process, Nespresso would lose control over the process and, more importantly, lose direct contact with its customers, which is at the core of its business model.

3.3.2 The Case of Apple

The success of Apple is surely driven by innovative products with an exceptional design. Without a unique distribution strategy, however, the company could never deliver the value to its customers in such a consistent and appealing way. This distribution strategy is perfectly in line with the model, describing what is needed to create a competitive advantage through the strategy by Michael Porter, as described at the beginning of this chapter. It is important to notice what lies behind Apple's motivation to adopt a dual distribution system (depicted in Figure 3) and effectively combine direct and indirect distribution model. Initially, Apple decided to implement direct sales due to the low perceived quality of service provided at traditional retailers. The sales people could never convey the message of Apple and customers would not see the value in their products (Tobak, 2010). The same rationale can also be observed in the case of Tesla (Musk, 2012).

Apple stores are iconic and often set as a benchmark for other companies. Owning all of its stores directly allows Apple to control the level of service in the stores and, more importantly, the price. Apple salespeople do not convince customers to buy, instead, they provide the potential customers with information about the products and about the whole Apple ecosystem (Tobak, 2010). Rather than a pure shop, Apple stores serve as a one-stop shop that can provide the customers with a wide range of services, from advising the customers during a purchase of a new device, product support in case of troubles or breakdown, to product trainings for various products, including software. A Genius Bar can also be found in the Apple stores. There, a product specialists can provide the customers with support for hardware as well as software problems (Apple Inc., 2017). Thanks to using the direct distribution model, Apple can set the price. Moreover, Apple never discounts their products in the Apple stores (Tobak, 2010).

Another direct channel for Apple is its online store. Here, customers can log in with their Apple ID, which can be universally used across all Apple devices and in all its stores, including iTunes Store, App Store etc. Similarly as in the Apple Store, Apple never discounts its products online either (Tobak, 2010). Customers can also use the Apple Genius online on various platforms, which allows them to solve some of their problems quickly, without any hassles (Apple Inc., 2017).

Whereas Apple stores serve more as a form of promotion of the Apple brand, the third-party resellers that Apple uses generate most the retail revenues for the company

(Paczkowski, 2012). Apple has divided these business partners into several categories based on several criteria, such as turnover, staff certification, design of the stores, pedestrian traffic around the stores etc. The highest level of a third-party business partner is called Apple Premium Reseller. To become one, the retailer must comply with tough quality standards, staff certification and pass a certain turnover threshold. Furthermore, Apple Authorised Resellers must comply with the same conditions, the limits are, however, lower, especially in terms of turnover and the number of certified staff. Next in the ranking is the Apple Authorised Retailer. Big online or electronics store usually have this certification. They can hardly comply with the tough requirements of Apple Premium Resellers, mainly because Apple products create only a small proportion of their offer. It is also important to mention the Apple Authorised Solution Expert. These companies are not primarily selling products, but are providing services to professionals, mainly in the area of education or creativity tools. Typically, this company would help with setting up a professional graphical studio (Janeček, 2010).

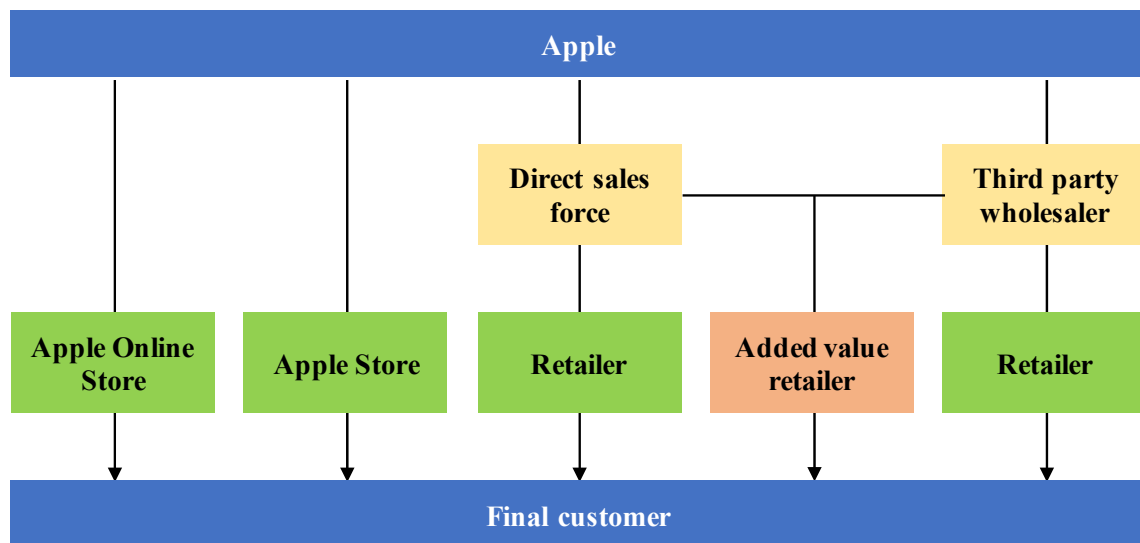
Apple also uses a specific pricing strategy called price maintenance. Its aim is to ensure that third-party resellers have a relatively small incentive to undercut the MSRP that Apple sets. Since Apple cannot dictate prices for them, this strategy enables it to have a relatively strong control over the final price. Apple offers only a relatively small discount for the wholesalers, which then translates to a very limited possibility to discount the products by the resellers. Therefore, retailers have a relatively small incentive to sell Apple products due to the low margin potential, but on the other hand, many retailers use Apple products to gain more foot traffic in their stores. Then they can sell competitors' products or accessories that have higher margins. Furthermore, Apple uses a Minimum Advertised Price (MAP) concept. MAP provides monetary incentives to resellers to advertise product at or above a certain level. This ensures that discounts on the products are minimal or none. Since the indirect sales channel is crucial to Apple's success, the MAP limits the possibility of price wars among resellers (Tabini, 2013).

The distribution strategy of Apple has some benefits that are noteworthy to highlight. Firstly, the primary use of Apple Stores is to promote the brand. Salespeople do not push to make a sale but despite that, Apple Stores are among the most profitable ones in the retail area (Paczkowski, 2012). Furthermore, Apple creates a consistent brand image across all the possible channels, including online. Moreover, even though Apple also uses

indirect distribution channel, it has a relatively high level of control over the final price of the products, allowing to maintain high margins for Apple.

There are many possible implications and best practices that can be transferred to the automotive industry from this case. Firstly, the dual distribution system, with its distinct pricing strategy for the third-party resellers, ensures both delivering a consistent brand image across all possible channels, including third-party resellers, and a relatively strong price control, even if the company cannot dictate the prices for the third-party resellers. These are very appealing to OEMs, as they seek a flexible system providing them with more control in terms of quality and price. Moreover, a direct contact with customers can be easily achieved. Some aspects of the Apple retail strategy can already be observed in the automotive industry, such as BMW Genius. At BMW dealership, BMW Genius is a product specialist whose main task is to help to customers with any BMW product or service related question (USA, 2017). The remuneration of a BMW Genius is not tied to sales volumes to ensure that he/she has the customers' best interest in mind.

Figure 3 Distribution strategy of Apple



Source: Rawal, 2017

3.4 Summary of the Cases and General Implications

Firstly, a model of dual distribution was described (chapter 3.1), as it might represent an interesting alternative to a purely direct distribution model from the perspective of OEMs. The dual distribution model is later further described using the case of Apple, which uses this model in the tech industry (chapter 3.3.2). An innovative approach to points of sales and also the whole distribution model can be demonstrated using the case of Nespresso,

described in chapter 3.3.1. Unlike any of its competitors from the industry, Nespresso distributes its products also through a network of premium boutiques.

Moreover, the online sales in the context of automotive industry was explained (chapter 4.4), as it is often incorrectly mentioned with regards to the direct distribution model. Selling vehicles online does not necessarily mean that the OEM is using a direct distribution model, as it will be further discussed in chapter 4.4. This is demonstrated using the case of BMW UK (chapter 3.2.2). BMW UK is piloting an online sales platform that uses the current dealer network, which ensures a full compliance with the BER regulation that has a severe impact on the automotive distribution.

Contrary to the case of BMW UK, the case of Tesla is described (chapter 3.2.1), as it represents a completely different approach in terms of distribution strategy. Whereas BMW is using the traditional indirect distribution model, except of its i model range, Tesla is using a pure direct distribution model for both online and brick-and-mortar stores. Tesla has leveraged the benefit of not having any distribution network and could design it to fit the innovativeness of the product. Tesla's advantage was also the fact that it did not have any franchised partners beforehand and, therefore, it is in compliance with the respective regulation.

In general, this chapter has discussed two cases of direct distribution within the automotive industry and two cases outside of it. The differences in the strategies are obvious, however, it should be noticed that the underlying motivation for the implementation of the direct distribution model is rather similar in all the cases—gaining more control over the distribution network. Another similarity in all the cases is the unification of multiple sales channels into one solution that allows a seamless transition between channels. In general, direct distribution gives the company a better control over the distribution process, whether it is quality of the service at the points of sales or price control. Moreover, it allows the company to get in a close contact with its customers and, therefore, directly influence the quality of service that is provided either at the point of sale or any other touchpoint on the customer journey. Despite the strong competitive regulation in the market, some companies are able to reach a relatively effective price control over the distribution network.

4 Direct Sales from the Perspective of Industry Experts

The primary research for this thesis is conducted using in-depth interviews with industry experts. This aims to provide a comprehensive view on the possibility of the direct distribution model implementation. The interviews were focused on several topics with regards to the direct distribution model. The underlying goal was to investigate the possibility of direct distribution being implemented in the automotive distribution, identify the main motivation for the implementation and determine the advantages and disadvantages of this system.

For the interviews, no specific questions were prepared. Instead, a list of areas to discuss was compiled to allow the interviewees to express themselves more freely (the complete list can be found in Appendix A). Firstly, the motivation of OEMs to implement direct distribution models was explored to identify the rationale behind the concept from the perspective of an OEM. The current distribution model has been used in the automotive industry for decades and therefore the OEMs' effort to redesign it indicates its importance for the automakers. Furthermore, the aim was to identify individual direct distribution models and discuss their potential implementation in OEMs' value chains. No such models were identified in the literature review and it was therefore one of the key areas to discuss during the interviews. The limiting factors of direct distribution in general and of specific direct distribution models in particular were also discussed during the in-depth interviews. The distinctions of direct distribution compared to the traditional distribution model are significant, the OEMs therefore need to analyse the implications of the direct distribution model implementation thoroughly. Moreover, the online sales channel in the context of automotive industry was discussed. Lastly, during the course of the in-depth interviews, an additional topic of new sales formats enabled by the implementation of the direct distribution model arose and will be therefore briefly discussed in this chapter.

For the purpose of this thesis, two in-depth interviews were conducted. Firstly, a distribution strategy specialist working for a Czech OEM (interviewee A) was interviewed for the above-mentioned topics. At the OEM, he is currently involved in the design of a new distribution system for the European market. Secondly, the findings were validated with a manager from EY Prague office (interviewee B), who provided an independent view on the topic. The manager has a rich experience in many topics within the automotive industry and is now focusing on the direct distribution for the automotive industry. The transcript of the interviews can be found in the Appendix B and C.

Both interviews were conducted in person to avoid any misunderstanding in the course of the interview. The findings from both, a two-hour interview with the distribution strategy specialist from a Czech OEM, conducted on 11th April 2017, and an hour-long interview with the EY automotive manager, conducted on 21st April 2017, will be presented in this chapter in the form of a summary of both sources with highlights of the difference in opinion of the two respondents. Additionally, findings from the literature review will be used in this chapter.

Direct distribution represents a deviation from the model that has been used in the automotive industry for the past several decades. There is more than one possible design solution of potential direct distribution and this chapter aims to briefly describe a few of them and highlight the main differences. The topic is however much deeper and involves much more subtle differences between the individual models and legal implications for all the involved stakeholders. This is, however, out of scope of this thesis.

4.1 Motivation for the Implementation of the Direct Distribution Model

Before explaining the individual direct distribution models, it is important to investigate the motivation of OEMs to explore and potentially implement the direct sales distribution model. Based on an interview with a representative of a Czech OEM, the main motivation of automakers is the level of uncertainty and unpredictability that the automotive industry is facing at this point (Interviewee A, 2017). This was also confirmed by the EY manager, focusing on the automotive industry (Interviewee B, 2017). As described in chapter 2, the role of the vehicle in customers' lives might change dramatically in the coming years and it is up to the OEMs to create their strategies now. The direct distribution model would give them a higher level of control over the whole sales process and hence improve the ability to withstand disruptions (Interviewee A, 2017).

The level of control underpins many of the reasons why automakers are investigating the direct distribution model. Using one of the types of direct sales would allow the OEMs to have a better control over the final customer price of the vehicle, which is not the case at this point. The OEMs lose a significant proportion of profits on different types of discounts, impacting the profitability of the business heavily. The level of control, however, does not concern only the price. Currently, the OEM does not own the dealerships. The direct distribution model would allow the OEM to steer the whole

distribution value chain more effectively and, more importantly, with lower cost (Interviewee A, 2017).

On the other hand, there are some negative factors about the direct distribution model that would need to be overcome. Firstly, there is a consensus in the automotive industry that, by definition, a separate entity is better at sales than the OEM would be. The reason is simply the distance from the centre of decision-making. In a dealership, salespeople have a daily contact with their boss, on the other hand, if the salespeople were employees of the OEM, the distance from the CEO would be significant. Moreover, the further the salesperson is from the management, the weaker the emphasis on sales targets is. This might eventually lead to a decrease in sales (Interviewee A, 2017). Contrary to this, Tesla is convinced that it can provide a better service only through OEM-owned retail locations (Musk, 2012).

As mentioned in chapter 1.1.1, the distribution in the automotive industry is strongly influenced by the BER. Moreover, the contracts that the OEMs have with all their stakeholders are a limiting factor and it would require a considerable effort to implement the changes. There is a lot of ambiguity around what the OEM can and cannot do. Internal legal departments often do not have a clear answer for that, especially with regard to the updated version of the BER that should be in place by 2022 (Interviewee A, 2017).

Another significant limiting factor for the implementation of direct sales is also the level capital that needs to be invested in the new design of the distribution network. Currently, OEMs sell the vehicle once it leaves the assembly line. In the case of direct sales, the OEM would still be the owner of the vehicle up until the point of customer handover. Currently, dealers often use financing from leasing companies between the points of buying the vehicle from the distributor and selling it to the customer. The same logic might be applicable for the OEM. The OEM will, however, require leasing on incomparably more vehicles, resulting in very tough negotiations (Interviewee A, 2017).

4.2 Potential Direct Distribution Models

The direct distribution model in the automotive industry has many possible design solutions. This chapter aims to describe some of the most important ones and explain them briefly.

The exact opposite of the traditional indirect distribution model is the **pure direct distribution model**. In this model, the OEMs sell the vehicles or other products directly

to the customers. There might also be an intermediary included in this model that will most typically conduct a specific task, such as the PDI. The intermediary will, however, be either owned by the OEM or will act as an agent. Theoretically, the intermediary could be a dealership, only under a very different contractual setting. They would typically act as an agent and get a commission for the particular activity. Should this model be used for vehicle distribution, the OEM would be the owner of the vehicle until the customer handover. Therefore, a financial services provider would be engaged to help the OEM to cope with the high investment intensity (Interviewee B, 2017).

This model, depicted in the Figure 4, is used by Tesla, which is the only OEM fully using some sort of a direct distribution model (discussed in chapter 3.2.1). The obvious benefit of this model is the full control that the OEM has over the distribution model. The OEM can therefore control every aspect, such as price and location of its sales points, without the need to negotiate every aspect of it with various stakeholders. The OEM is also responsible for all related back-office processes and invoicing of the customer. This solution would, however, put an enormous pressure on the OEM. On the other hand, the OEM might be able to reach economies of scale and hence create a more effective system. Such model would be applicable only for a very exclusive product. For a volume OEM, this model could work only for special cases, such as a large fleet, VIP customers or some types of digital services (Interviewee A, 2017).

Figure 4 Pure direct distribution model



Source: Distribution Strategy Specialist - Czech OEM, 2017

Another direct distribution model uses the **distributor as an intermediary** between the OEM and the customer. The role of the distributor would remain the same and the distributor would also overtake some of the responsibility of the dealer. Furthermore, in some cases, the distributor might also use an intermediary to conduct a specific activity, such as the PDI or vehicle handover. The importance of the intermediary is, however, decreasing over time, since the PDI could be done over the air for EVs. Alternatively, the PDI could be conducted centrally. This PDI centre would be the intermediary in this

particular distribution model. Moreover, the intermediary might be used to conduct a particular activity with regards to the sale of digital products and services. Should this model be used for vehicle distribution, a finance provider would be engaged to help the OEM to cope with the capital-intensive nature of the model, as the OEM would own the vehicles throughout the whole distribution process until the customer handover (Interviewee B, 2017).

The benefit of this model is the local market knowledge of the respective distributor that would be difficult to obtain for an OEM. The distributor would also work on adapting and localising the product offer for the respective market. Moreover, the distributor would be responsible for the customer relationship management. This would enable the OEM to get closer to the customers, compared to the traditional indirect distribution model. The relative disadvantage in comparison with the pure distribution model is the complexity of the model, as it involves more stakeholders (Interviewee B, 2017). The distributor as an intermediary distribution model is depicted in Figure 5.

Figure 5 Distributor as an intermediary



Source: Distribution Strategy Specialist - Czech OEM, 2017

The following model is very similar to the traditional indirect distribution model. Points of sales in the network are however operated either by the OEM or the distributor. The points of sales could have a wide variety of possible formats, such as traditional dealerships, city stores etc. From the perspective of an OEM, this is the most common-sense solution, as it would not be as difficult to implement as the previous models (Interviewee B, 2017).

This model is currently used by some brands for their fleet sales and also by BMW for their i models. BMW uses the agent system, but only for the i models. This means that the retailers at the point of sales only get a commission from the sale and therefore have only a very limited space for price negotiations and discounts for the customer. From the perspective of the OEM, this is the most significant benefit, as it gains a relatively strong control over the price (Interviewee B, 2017). An aspect of dual distribution can be

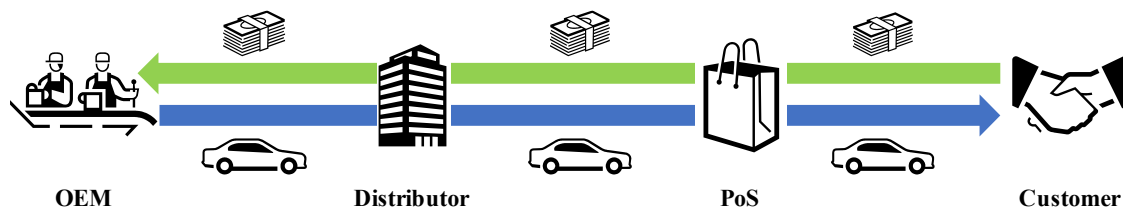
observed in this case, as BMW uses both the traditional dealer network as well as the agent model for their i model range. Due to the separated product range for its partner, BMW is able to combine these two channels and effectively create a dual distribution system, as was explained in chapter 3.1.

The agent system has its specifics compared to the traditional indirect distribution model. Firstly, it is important to distinguish between a genuine and non-genuine agent. In both cases, the OEM is the owner of the vehicle throughout the whole process until the customer delivery and the agent only acts on behalf of the OEM. The agent system does not allow for a total control over the price, but it gives the agent only a limited space for discounts, resulting in higher profit margins for the OEM (Interviewee B, 2017).

The main difference is the level of risk that the OEMs are taking over from the agents. In the genuine agent model, the OEM takes over all the risks related to the business. OEM cannot even impose significant cost items on the agents. For that reason, the OEM would have to do e.g. all the marketing activities centrally. On the other hand, the agents get only a small commission for their service. This might, however, lead to a decreased motivation of the agent to conduct the sales and in general to behave as a business. The loss of agent motivation is therefore the main disadvantage of the genuine agent business model (Interviewee B, 2017).

On the other hand, in the non-genuine agent model, the agent takes over some of the risks from the OEM, which gives the OEM more flexibility, compared to the genuine agent model. Moreover, due to the lower level of risk on the agent side, the agents also gain a smaller commission for their services. The level of commission then determines the potential room for discounts, which in the case of a non-genuine agent is relatively small (Interviewee B, 2017). The distributor with points of sales is depicted in the Figure 6.

Figure 6 Distributor with Points of sales model



Source: Distribution Strategy Specialist - Czech OEM, 2017

4.3 New Sales Format in Automotive Distribution

The direct distribution model, potentially using the dual distribution system, will allow for new retail formats to be implemented. These models might also be piloted under the current setting, however, due to the high investment needed or the low profitability of the concept, these models are more suitable for the direct distribution model. Some of the retail formats would not be appealing for traditional independent dealerships. Although it might make sense to neglect the traditional dealership completely, 85 percent of customers still use some of the dealers' touch points. On the other hand, one fourth of customers is not satisfied with the experience at the dealership (McKinsey & Company, 2014). Since all dealerships today are privately-owned independent companies, their primary driver is profit. If, on the other hand, the OEM (or the distributor) were the owner of the retail location, the goals for that particular location might be significantly different. The OEM would focus on more long-term goals and intend to improve its overall brand image by offering exceptional customer service. Furthermore, these locations might not sell any products at all and instead focus on the customer experience only. This aspect is fuelled by the decreasing number of customer visits before a vehicle purchase and, on the other hand, by the customers' desire for new and innovative sales formats. Crafting their own distribution formats, OEMs would be able to get a direct contact with their customers and gradually build the CRM system that many of the automakers are lacking (McKinsey & Company, 2014).

Among the most innovative sales formats within the automotive industry is the online sales channel. This will be the subject of the following chapter. Furthermore, customers will seek for a more convenient solution to their needs. To find a suitable solution for the customers, OEMs will have to implement new retail formats, including test-drive centres, superstores, city stores, including temporary pop-up stores, and mobile salespeople (McKinsey & Company, 2014). These formats will be briefly discussed in this chapter and then used to suggest an optimal distribution network in chapter 4.

Firstly, test-drive centres would typically be large OEM- or distributor-owned properties in suburban areas. Thanks to the large stock of available vehicles, it would be attractive for the potential customers to do a test drive with several alternatives before making a purchase decision. As 80 percent of customers take a test drive during the purchasing process (McKinsey & Company, 2014), high attractiveness of test-drive centres is expected. Furthermore, the test-drive centre could be equipped with a special track for

special purpose vehicles such as an off-road track for SUVs. Based on the McKinsey report, almost 80 percent of customers find this option appealing (McKinsey & Company, 2014).

Another potential concept that would be enabled by the direct or dual distribution model would be the superstores. The concept of the superstore is a large, easy-to-reach location in a suburban area. The main benefit from the customer's perspective is the huge variety of vehicles that are available on stock and therefore with no delivery time for the customer. Almost 80 percent of customers find this idea appealing (McKinsey & Company, 2014). From the perspective of the OEMs, this model could potentially allow for a higher efficiency in stock vehicle management. Due to the capital-intensive nature of the concept, this would be hardly achievable by individual, private-owned dealers (McKinsey & Company, 2014).

A concept that is currently relatively successful for Tesla (described in chapter 3.2.1) are the city stores. City stores could have various concepts but the underpinning idea is the emphasis on the customer experience. These locations are primarily not intended for vehicle selling activities but should rather provide the customer with the brand experience. The store should also serve as a one-stop location that could help the current or potential customer with any product or service related questions. Whereas premium brands are and will be using this format for brand experience, volume brands are more likely to use it as a point of information for the customer (Interviewee A, 2017). From the perspective of market coverage, the city store would offer the above-mentioned services and then feed the dealerships nearby with customer leads. This concept is appealing to more than 60 percent of customers (McKinsey & Company, 2014).

The distribution network might also be complemented by several flexible formats that would allow the OEM or distributor to get in a direct contact with the prospective customer. Firstly, pop-up stores might help the OEM to achieve a better brand awareness and improve the brand image at popular locations, usually in city centres or during a particular venue. This concept would be appealing to more than 50 percent of customers (McKinsey & Company, 2014). Secondly, mobile salespeople could help to guide the customers through the purchasing process. A salesperson would visit the potential customer at his/her preferred location and guide them through the purchasing process. The time and location are arranged based on customer preference. This concept would be appealing to almost 40 percent of customers (McKinsey & Company, 2014).

4.4 Online Sales in Automotive Distribution

When talking about direct distribution in the automotive industry, the term online sales is often mentioned. Having implemented online sales in the distribution strategy of an OEM does not necessarily mean that the OEM must use a direct distribution model. There are many possible ways how an OEM may implement online sales in its distribution strategy and this chapter aims to highlight the main aspects of online sales from the perspective of an OEM. If the OEM operated the online sales channel, either with or without the help of the dealer network, it would get a direct contact with its customers, which also represents one of the biggest benefits for the OEM. Furthermore, as described in chapter 1.1.2, OEMs typically distinguish between fleet and retail customers. The online sales channel is primarily aimed at private customers since fleet customers require a more individualised approach, especially in terms of financing options, and more complicated large fleet orders.

Firstly, it is important to identify which of the stakeholders in the distribution value chain is going to drive and operate the online sales platform. All the stakeholders in the process might potentially have their own platform for online sales. To simplify the discussions around this topic, it is possible to eliminate individual dealerships operating their own online sales for several reasons. It would be very costly for every individual dealer to operate their own online sales platform. The dealers might potentially use aggregating websites to promote their vehicles. This is however very unfavourable for the OEM, as the customer gets a direct comparison between dealers, which results in significantly decreasing margins. Furthermore, the whole retail experience might be very fractured for the customer since many dealers would offer significantly different solutions. Therefore, a united platform run by the OEM would be more effective and, in collaboration with the dealer network, it would allow for an ideal combination of virtual and physical channels (Capgemini, 2017).

The sales process, especially the delivery and handover to the customer, might be, however, very distinct for different types of vehicles. As mentioned in chapter 2.3.3, ICE vehicles need a physical PDI before being handed over to the customer. For that reason, all vehicles would need to go through the dealerships before being delivered to the customers. On the other hand, EVs can receive the PDI using the OTA technology and therefore the delivery process might be significantly simpler and home delivery might then be considered (Interviewee A, 2017).

Although it may seem that the role of the traditional dealership is diminishing rapidly, as was the case in other industries, it is likely that it will maintain its key position in the automotive distribution. Customers as well as OEMs value the personal approach that the dealerships maintain with their customers. Even though the majority of customers seek most of the information online, they still want to enjoy the benefits of the physical presence in the dealership. The role of the dealership might therefore change to a more advisory role, helping the customer with complex products offers and additional equipment and services, but also offering financing and insurance. Moreover, many customers expect to have a test drive before a vehicle purchase (McKinsey & Company, 2014).

Some OEMs have already implemented the online sales in their distribution strategy, such as Tesla (chapter 3.2.1) or BMW UK (chapter 3.2.2). Others are launching pilot projects that might serve as a proof of concept for a future expansion of their business models. The example of ŠKODA AUTO in the Czech Republic can be used to describe the approach of a volume OEM. At this point, ŠKODA would not be able to sell vehicles online directly to the customers, so it uses a variation of the model to achieve similar results. Instead of a vehicle purchase, the customers can configure their vehicle and then get a leasing for it for a pre-defined period of time, effectively renting the vehicle. This allows ŠKODA to fix the price and avoid the price negotiation required by the BER. Once the customer places an order, he/she chooses the dealership based on his/her preference. This dealership is then required to process the order for the customer. Furthermore, ŠKODA as an OEM does not have any contract directly with the customer. The customer has a contract with the company providing the leasing service (Interviewee A, 2017).

5 Application of the Research Findings on the Automotive Distribution

The indirect distribution model that is currently used by most OEMs is unlikely to fulfil all the requirements that automakers will have on a distribution system. Due to the high uncertainty level of future development that is caused by several new trends in the automotive industry (as described in chapter 2), combined with the changes in the distribution related regulation (Ernst & Young LLP, 2017), it is important to come up with a system that will give the OEMs a higher level of control over the whole distribution process. This will allow them to steer the distribution through the times of uncertainty and help them to create a more profitable system. Moreover, the OEMs would get a direct customer contact and could gradually build up their own customer database, which is currently a huge pain point for some of the automakers.

As was already mentioned in chapter 4.2, it seems unlikely to apply one distribution model to suit the needs of every customer. The customer groups that an OEM identifies are very diverse and expect different approaches. Also, the OEMs have developed their distribution networks for the past decades, so they are likely to leverage their past investments. Moreover, there are also technical limitations to certain distribution models that need to be overcome to comply with the regulations, such as the necessity to conduct a PDI prior to vehicle delivery for ICE vehicles (Interviewee A, 2017).

As described in chapter 1.1.2, the OEMs typically split their customers into two basic groups, retail and fleet. Both groups require distinct approaches and slightly different purchasing processes. This aspect will also be considered when an optimal distribution strategy is outlined. Firstly, the product and service portfolio of a typical OEM for the upcoming years will be outlined to depict how complex product portfolio the distribution strategy needs to cover. The suggestion of a distribution strategy will then consist of a mix of different models, as described in chapter 4.2, creating together a united model. The suggested approach is considered for the timeframe of five to ten years.

5.1 Product Portfolio of an OEM

Product portfolio of OEMs will change significantly in the upcoming years, as described in chapter 2. For the purpose of this thesis, it is assumed that a product portfolio of an OEM will consist mainly of vehicles, both EVs and ICE vehicles, mobility service offers

and additional services. The specification of the product portfolio will then serve as a base for designing the suggestion of a distribution network.

Firstly, the OEMs are expected to focus still mostly on engineering and manufacturing both **ICE and electric vehicles**. Although a rising share of EVs is expected, the majority of production will consist of ICE vehicles. The EVs are expected to reach about 25 percent of the market share on the automotive market in the European Union (McKinsey & Company, 2017). This is mainly caused by the strict emission regulation imposed in Europe (European Parliament and the Council, 2014). The split between ICE and electric vehicles is crucial from the distribution perspective, as EVs allow for a simpler delivery process, thanks to their relative technical simplicity (Interviewee A, 2017).

Furthermore, some of the OEMs will focus on providing their customers with alternative **mobility solutions**. This could cover a wide range of services, as described in chapter 2.1. Although dealers might provide their own mobility services, it is expected that the market will be dominated by several large players, recruited mainly from the newcomers from the tech industry. The OEM will however try to claim their stake in this market (McKinsey & Company, 2016).

A significant proportion of revenues in the automotive sector is expected to come from the **digital services** that are currently gaining a momentum (McKinsey & Company, 2016). The main driver for the uptake of the digital services is the availability of connectivity in new vehicles (European Commission, 2015), allowing OEMs to monetise this opportunity. Moreover, the increased complexity of vehicles is forcing the manufacturers to come up with solutions. This could be solved by introducing software updates and upgrades of the vehicles. Moreover, the vehicle can become a new platform for new digital services, due to the continuing uptake of advanced drivers' assistance systems and autonomous driving (McKinsey & Company, 2016). The most important digital products, from the perspective of the OEMs, will therefore be digital services, such as in-car delivery in cooperation with delivery companies, digital content, such as multimedia or news, and software improvements to the vehicle, such as software unlockable features, e.g. the example of heated seats as a service described in chapter 2.4.1. A higher potential for software upgrades can be expected in the electric vehicle segment, thanks to its relative technical simplicity. Furthermore, a massive increase of revenues from digital content is expected once the autonomous vehicles will gain a momentum in the automotive market (McKinsey & Company, 2016).

Although a major proportion of revenues within the automotive sector comes from the aftersales, used cars business and finance & insurance (Oliver Wyman, 2015), these revenues will be neglected for the purpose of this thesis. It also depends on what an individual automaker will consider as aftersales revenues, as the boundaries between the categories might be defined differently for different OEMs.

5.2 A Possible Direct Distribution Proposal

The proposed distribution strategy will be based on a couple of assumptions. Firstly, an OEM with an existing indirect distribution network is considered. Furthermore, the product portfolio of the automaker consists of the product line-up described in the chapter 5.1. Before designing the optimal distribution strategy for the OEM, it is important to set goals for the future distribution strategy. The underlying goal for the new distribution strategy is the significant increase in the level of control the OEM has over the distribution process to be able to control both qualitative as well as quantitative aspects of the distribution. This was identified as the most important goal from the perspective of an OEM (Interviewee A, 2017). As all the incumbent OEMs have invested heavily in their current distribution network, another goal of this strategy is not to waste this investment and leverage the current network (Interviewee A, 2017). As mentioned at the beginning of this chapter, there are two major customer groups that the automakers identify. Therefore, the suggested distribution strategy will propose a distinct distribution model for fleet and retail customers. The proposal will be based on findings identified on examples from automotive as well as other industries and, more importantly, on interviews with industry experts conducted for the purpose of this thesis. Furthermore, as mentioned already a few times in this thesis, the proposed distribution strategy will not focus on aftersales.

5.2.1 Proposed ICE and Electric Vehicles Distribution Strategy

The suggested approach outlined in this chapter will be divided into retail and fleet sales channels. For each of these sales channels, a distinct distribution model will be identified. Each suggestion for a particular distribution model will be justified, using the findings from the previous chapters. The purpose of this complex system is to create a flexible system that would allow for a better control over the distribution network. Before explaining the details of the proposed strategy for the vehicle distribution, it is important to mention the crucial differences between different types of distributors, as described in

chapter 1.1. Whereas the importer is a privately-owned company with an exclusive right to distribute the vehicles at the particular market, a NSC is owned by the OEM. This difference is crucial for the implementation of the direct distribution model. In the case of NSC, a transition to the direct distribution model would not represent a problem. On the other hand, in the case of an importer, the OEM would have to try to renegotiate the terms of the contract to allow for changes in the distribution network in that particular market. Under the current setting, it would be up to the importer whether to make the transition to the direct distribution model (Interviewee A, 2017).

Firstly, the **retail vehicle distribution of ICE and electric vehicles** will be discussed. The proposed distribution strategy for retail customers involves both physical and online sales channels. To start with, the physical online channel will be described. From the perspective of an OEM, the most preferred option would be the **distributor with Points of sales model**, described in Figure 6 (Interviewee A, 2017). This model would be suitable for both ICE as well as electric vehicles, as there are no limiting factors for either of these technologies. The main reason for using this model for the physical distribution of both ICE and electric vehicles is the massive investment the OEM has put into the current network. Under this setting, the current dealers would transform into agents (Interviewee B, 2017). This contractual change would have a significant effect on the distribution. The price of the vehicles would be relatively fixed and the OEMs would get a much better control over the network, as the agents' remuneration scheme would be commission-based. This distribution model would also mean that the OEM would be the owner of the vehicle until the point of a customer delivery. This would be extremely capital-intensive model and the OEM would therefore have to negotiate a partnership with a financial institution to back up the distribution process (Interviewee A, 2017).

Under this setting, also the role of the distributors would change, as they would overtake some of the dealers' agenda. Most importantly, it would be the CRM system management. Currently, the dealers are the only entity in the distribution value chain with a direct customer contact. If the dealers were transformed into agents, the distributor would get a direct access to the customer database. The role of the distributor in this model, as it is under the current setting, would be the local market expertise that would be hardly replicable by a team at the OEM HQ (Interviewee A, 2017).

Additionally, new sales formats, as described in chapter 4.3, operated by the distributor might be implemented in the distribution network. Due to the fact that the dealer network

would be transformed into agents, the OEM would not be competing with its franchised partners on any level. The introduction of new sales formats in the distribution network would also allow for a better sales network optimisation. If a superstore was built in a specific suburban area, a nearby dealership might not be necessary anymore. It might be then transformed into a service location. This might eventually be more profitable for the dealers (agents under the new setting), as the majority of their revenue comes from aftersales business. If the dealers were focused on service only, it would allow them to become more efficient in their operations (Interviewee A, 2017).

The potential negatives of the proposed distribution model, which would have to be examined more thoroughly and observed during the implementation process, is especially the motivation of agents (Interviewee B, 2017). Since the remuneration scheme would change significantly, also the business motivation of the agents would be much different. It might be expected that the sales would decline in the short-term, on the other hand, the long-term customer satisfaction would likely increase due to the higher OEM control over the network and the emphasis on quality of services at the points of sales.

Secondly, the **retail online distribution channel for both ICE and electric vehicles** will be discussed. With regards to the ICE vehicles, a similar system that is currently used by BMW UK might be implemented. The online channel would be operated by the national distributor. Due to the fact, however, that an agent system for the physical distribution was suggested, the OEM might also be able to get more control over the online distribution than in the case of BMW UK. It would not be required to allow the customer to negotiate the price, as required by the current version of the BER, which would allow the OEM to gain more control, especially a solid price control (Interviewee B, 2017). In the case of ICE vehicles, the distribution model would involve the agents, especially due to the required PDI. For conventional vehicles, the PDI must be done at a certified location, which would be the role of the agent. In the case of the electric vehicles, however, the vehicle might be delivered directly to the customer, as the PDI might be, owing to its relative technical simplicity, done using the OTA technology. The online sales of EVs might therefore be either in the hand of the local distributor or an agent (Interviewee A, 2017).

Furthermore, the proposed **fleet distribution model for ICE and electric vehicles** will be discussed. From the perspective of fleet sales, the distribution will follow the same distribution model as described in the retail distribution model. The main difference

between the retail and direct sales will be the case of large fleet orders. The definition of a large fleet order will largely depend on the definition of a local distributor, as this definition is very market specific, typically between 30 and 50 vehicles per year. With large fleet orders, the OEMs need to implement a system that will allow them to be very competitive in large fleet tenders (Interviewee A, 2017). For that reason, the implementation of a distributor as an intermediary model, as depicted in Figure 5, would be the most appropriate for this channel.

This setting would allow the OEM and the distributor to gain a perfect control over the distribution in case of large fleet orders, cut margins of dealers and hence be more flexible with the price. The dealer, or agent under the new setting, would play the role of a delivery point, if required by the client, and a service location for the fleet.

5.2.2 Distribution Strategy for Mobility Services

As mentioned in previous chapters, many of the OEMs are going to provide the customer with alternative mobility solutions, in contrast to the traditional vehicle ownership (McKinsey & Company, 2016). For the sales of the mobility services to both private and corporate customers, online and offline sales channels are considered.

Online sales of mobility services would be on the agenda of the distributors. The distributors would then in most cases use an intermediary to carry out the actual sales, but the service would be run by a distributor (Interviewee A, 2017). In this case, therefore, the OEM would use the distributor as an intermediary distribution model. This model ensures a high level of control over the distribution process and, on the other hand, offers a local expertise brought by the distributor. Furthermore, the relatively simple distribution value chain allows for a higher profit margins for both the distributor and the OEM (Interviewee B, 2017). From the perspective of an OEM, it is important to create a unified shopping experience for all its products sold online. Therefore, it would be beneficial to create a user ID, similar to Apple ID as described in the case of Apple in chapter 3.3.2. This user ID would serve as an identification for all possible touch points the customer might have with the OEM—an online store for new vehicles and mobility services and even an online store for digital content and software upgrades as described in the following chapter.

For the **physical distribution of mobility services**, the new sales format would be an optimal solution. Current dealers do not have a motivation to sell mobility services to the

customers, as they get most of their profit from aftersales services, and hence the dealers would not directly benefit from a customer subscribing for a mobility service (Interviewee A, 2017). Furthermore, the dealer might not be the right ambassador of such an innovative idea, as it is not in their interest to sell it. On the other hand, the dealers or other service locations would benefit from this trend due to the increased demand for the vehicle maintenance of shared vehicles (McKinsey & Company, 2016). For the purpose of mobility solution sales, the concept of city stores, described in chapter 4.3, would be ideal. The distributor-operated city store, located in the city centre of a large city, would serve as a one-stop-shop for everything a current or prospective customer of the brand might need. The remuneration schemes of the employees of the store would not be based on commissions to ensure that they have the customers' best interest in their mind.

5.2.3 Distribution Strategy for Connectivity and Digital Services

The distribution model for connectivity and digital services is relatively simple due to the nature of the product. The distribution will be based on the pure direct distribution model. The pure direct distribution model might then involve another intermediary, conducting the actual sale (Interviewee B, 2017). The primary distribution channel will be online on various platforms. The customer will be able to purchase the products either directly in the vehicle, from the vehicle's infotainment system, or, alternatively, on a computer or a mobile device, when he/she logs into his/her account. Since the account will be connected with his/her preferred payment option, the customer would be able to purchase the products directly in the vehicle or online.

Moreover, digital services and content might also be offered through both the agent network and the network of the brand's own retail stores, such as the city stores. In this case, the pure direct distribution model would be complemented with points of sales. The physical aspect will be crucial especially for brands with more conservative customers, as the new digital offers might be confusing for some of their customers. The product specialist will be able to guide the customers through the purchasing process, advise them on any product-related question and help in the case of an error. The product specialist would help the customer by logging in their user account and then do what they are asked for.

5.3 Evaluation of the suggested approach

The overall impact of the new distribution strategy implementation will be evaluated both qualitatively and quantitatively. In the qualitative part, emphasis will be put on fulfilling the goals set at the beginning of this chapter, as well as on evaluating the general advantages and disadvantages of the proposed distribution strategy. Since the quantification of the benefits is very individual for each OEM, a general model by the Justice Department economist will be presented. Although the actual savings will be individual for each OEM, the potential areas for savings will be similar for every automaker.

The underlying goal of the new distribution strategy implementation was the increased level of control over the distribution process. Due to the implementation of the direct distribution model, the level of control increases for several reasons. Firstly, thanks to the fact that the traditional dealer network was transformed into an agent network, the OEM gains a direct control over the distribution and can, for example, control the price of vehicles easily. This aspect will be especially beneficial in fleet sales, where the OEM might be more competitive, as it does not have to include margins for the dealer network. Moreover, thanks to the fact that the dealers are not franchised partners anymore, the OEM is able to open distributor-operated retail locations that will allow for an overall increased network efficiency. This would not be possible under the current setting, due to the current version of the BER.

Another goal for the implementation of the new distribution model was the ability to have a direct contact with customers. When it comes to vehicle distribution, dealers would be transformed into agents. This generally means that the agent is just conducting the sale on behalf of the distributor. Owing to this, the distributor has a direct access to all customer data that might be later used for a further network optimisation or other analysis. It would also allow to build up a solid CRM database, which is currently in the hands of the dealer network and neither the distributor nor the OEM have access to it.

Furthermore, the aim was also not to waste the past investments in the current dealer network that has been gradually built up in the past decades. Thanks to the transition from dealers into agents, the investment will not be wasted, since the business will continue to operate, only under a different contractual setting. Due to the possibility of a network optimisation, the OEM or the distributor might decide to close some of the current

dealerships and transform them into service locations only. This might, however, be eventually more profitable for the owners, as it will allow them to create more efficient operations.

As mentioned at the beginning of this chapter, the cost impact estimation is highly individual for each OEM due to the complexity of the distribution process and its variety across the industry. The overall cost savings as a result of the direct distribution implementation consist of savings from many areas of distribution. To demonstrate the potential savings along the value chain, an estimate of a Justice Department economist can be used (Crane D. A., 2014). Since this estimation is based on the example of the US market, it might be expected that in Europe, the savings will be potentially even more significant, since currently the distribution process in Europe involves more stakeholders than in the US.

Cost savings are estimated to reach up to \$2,225 or 8.6% of the vehicle price if the direct distribution model is implemented. The cost savings has several sources along the value chain. The total \$832 of cost savings comes from fixing the mismatch between supply and customer demand, \$575 can be attributed to the lower need for a vehicle inventory, \$387 are a result of fewer dealerships and more effective network operations, \$381 are a result of lower commissions for the dealers and, finally \$50 are saved on the lower overall shipping cost (Crane D. A., 2014). This cost estimation is, however, only calculated for the pure direct distribution model. The proposed strategy consists of a combination of various direct distribution models and hence the impact would be slightly different. The calculation, however, displays the main cost drivers and potential savings in the case of the direct distribution model implementation.

The implementation of the direct distribution model would, on one hand, save a significant amount in costs, as described above, on the other hand, it would also generate additional costs, especially on the distributor or OEM side. The newly-created administrative cost that has been carried mostly by dealers in the original distribution setting would be transferred either to the distributor or an OEM. Since the administrative operations would be done centrally at one location, significant economies of scale might be expected, offsetting the increased initial cost.

Conclusion

The current status quo in the automotive distribution that has lasted for the past several decades is currently being challenged by the uptake of many new technologies and also changes in customer preferences. Furthermore, the incumbent OEMs are challenged by the market entry of newcomers from within and outside of the automotive industry. It is important for these changes to be reflected in the distribution strategy of the automakers. The currently used distribution system has not been significantly changed since its implementation many decades ago. The automotive distribution accounts for about one third of the automotive value chain, it draws very little attention and is seldom discussed in public. The indirect distribution does not and, especially for legal reasons, cannot reflect the changes in the industry. Therefore, automakers are looking for an alternative to this system. The direct distribution model allows the automakers to better manage the uncertain environment caused by the simultaneous effects of many new trends. This model is currently used by Tesla, but a wider expansion of this model might be expected in the future.

The aim of this thesis was to discuss the direct distribution model in the context of the automotive industry as an alternative to the traditional indirect distribution model. The main goal was to suggest an optimal distribution strategy, using some variations of the direct distribution model for the defined automakers. Furthermore, the suggested approach was evaluated on both qualitative and quantitative levels. Although some drawbacks of the direct distribution model were identified, such as high capital requirements and a potential clash with the current regulations, the negative effects would be likely offset by the positive effects of this model. Most importantly, the automakers will gain more control over the distribution process, which would allow them to control the price or quality of service at the points of sale. Furthermore, in the case of the dual distribution model implementation, a synergy effect was identified between the current dealers and the manufacturer-owned retail locations. From a quantitative perspective, several areas of potential savings were identified, resulting in a cost-saving of almost nine percent (in a specific case).

The methodology of the thesis was built on a primary as well as secondary research. Firstly, a secondary research was used in the form of a thorough literature review of the respective topic. The findings from the secondary research were then used as a theoretical background of the thesis. During the secondary research, a set of relevant cases was also

identified, helping to describe the best practice in terms of the direct distribution model from both within and outside of the automotive industry. Secondly, a primary research was conducted in the form of in-depth interviews with experts from the automotive industry. The aim of the primary research was to describe the motivation of automakers to implement the direct distribution model as well as to identify various direct distribution models.

In the first chapter, the indirect distribution model, currently used by the majority of automakers, was described. Firstly, the legal framework was defined by describing the current version of the BER. Due to this strict regulation, automakers struggle to implement some of the innovative distribution concepts and must therefore look for alternatives. Furthermore, the role of the main stakeholders in the current setting of automotive distribution was described. The indirect distribution model involves three key stakeholders: OEM, distributor and dealer. Firstly, the role of the OEM was described in the context of the indirect distribution model. Secondly, the role of the distributor was described, highlighting especially its importance from the perspective of the local market expertise and dealer network management. Lastly, the role of the individual dealerships was described. Most importantly, the dealer is the only customer-facing entity in the distribution process, which presents a problem for the OEMs, as they have only a limited control over the dealers.

The second chapter focused on the description of four new trends identified as a potential major threat to the current distribution model. Firstly, mobility services were described and their impact on the current distribution model was suggested. Mobility services are currently on a rise, mainly due to a change in customer behaviour. Secondly, autonomous vehicles were presented, as they present a threat to the current distribution model in the long-term horizon of five to ten years. Furthermore, the different typologies of EVs were described to explain the potential implications of the uptake of electric vehicles. Due to their relative technical simplicity, it is possible to simplify the distribution process, which is appealing to the automakers. The in-car connectivity, together with related products and services, is gaining a momentum and the topic of its distribution to the customer is very relevant, especially from the perspective of the current and, more importantly, the prospective version of the BER. The findings from this chapter are then summarised to provide the reader with a comprehensive summary of the implications of the new trends on the current distribution model.

The direct distribution model was presented in the third chapter as an alternative to the current distribution system. The theoretical background was based on the concept of dual distribution which is successfully used by some companies. This was demonstrated on the case of Apple, which uses the dual distribution system to provide an exceptional customer service as well as to be able to sell sufficient sales volumes. To provide more insights in the topic and identify the best practice from both automotive as well as other industries, several cases were presented, outlining various direct distribution models.

The aim of the fourth chapter was to provide a view on the direct distribution model from the perspective of experts in the automotive industry. This was done through in-depth interviews with selected industry experts, who were interviewed on a series of topics related to direct distribution in the automotive industry. Firstly, the motivation of automakers to consider and implement the direct distribution model was identified. Moreover, several direct distribution models were identified, as it gives the automakers more freedom in deciding on how to distribute their products to the customers. The application of the direct distribution model would also allow to implement new sales formats in the current distribution network. These would allow the automaker to create a more efficient and profitable distribution network.

In the last chapter, the application of the findings from both the primary as well as secondary research was suggested. Firstly, a prospective product portfolio of an OEM was outlined based on the secondary research data. For each of the products, an optimal distribution strategy was proposed for both the retail as well as the fleet customers. The proposed strategy consists of multiple direct distribution models identified during the primary research. Finally, the proposed strategy was evaluated both from qualitative and quantitative perspectives to prove its feasibility in comparison to the current distribution model.

Managerial implications

This thesis discusses the topic of potential implementation of the direct distribution model in the automotive distribution and might be primarily useful for distribution strategy managers in OEMs, as well as for other automotive experts from the industry. The topic of direct distribution is very current within the automotive industry and this thesis might be hence useful for the abovementioned stakeholders. This thesis identifies potentially

increased efficiency and synergies in case of the direct distribution model implementation that might be further investigated on an individual basis for each OEM.

Limitations

Firstly, it is important to mention the potential collision of the suggested approach with the current and the future version of the BER and other related regulations. The full legal compliance of the suggested approach is out of scope of this thesis.

Another limiting factor of this thesis is the size of the sample for the interviews, as only two in-depth interviews were conducted. There are several reasons for the small sample size. Most importantly, from the perspective of an OEM, the distribution strategy is a very sensitive topic for a number of reasons. Firstly, it is a part of the overall corporate strategy and therefore the company representatives are not willing to share many information about the strategy of the respective business. Moreover, the OEM representatives are trying to limit any direct sales-related communication to bare minimum, as it is also a sensitive topic for the dealer network. Individual dealerships, in most cases privately-owned companies, have invested heavily in the recent years and any potential major change in the contractual setting might have a severe impact on the whole distribution network.

Suggestions for Further Research

Further research should focus on increasing the number of interviewers and also including other stakeholders from the distribution process. In this thesis, only an OEM and a consultancy firm were interviewed, however, it would be useful to include the points of view of current dealerships and also customers. From the customer perspective, the focus of the interview might shift towards topics such as fixed price, new sales formats etc. Complementing the qualitative research, also a quantitative research might be carried out to get a broader perspective on the topic.

Furthermore, the quantification of the impact of the direct distribution implementation in this thesis is only general and might serve as a proxy for further research. As mentioned in the previous chapter, the quantitative results of the direct distribution implementation will vary significantly for different OEMs. To be able to conduct a solid quantification, it would have to be carried out in cooperation with one of the OEMs, as without the OEM's data, it is not possible to calculate the benefits of the direct distribution implementation precisely.

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Appendix

Appendix A: Outline of the discussion areas for the industry expert interviews

- Motivation of the OEMs to explore and implement the direct distribution model
 - Disadvantages of the current distribution models
 - Goals for the new distribution model
- Potential individual direct distribution models
 - Which models might be suitable for the identified individual distribution models
 - Which aspects of the current distribution model should be preserved in the new model
 - Differences between the genuine and non-genuine agent system
 - Implementation of new sales format enabled by the new distribution model
 - Online sales enabled by the direct distribution model
- Impact of the direct distribution model implementation
 - Cost savings
 - Potential cost increase
- Potential limitations of the direct distribution model and obstacles for the implementation phase
 - Current contractual setting with the dealer network
 - Compliance of the individual distribution models with the current and upcoming version of the BER

Appendix B: Transcript of interview with distribution strategy specialist – ŠKODA AUTO (2017, April 4)

Why does the OEM consider direct sales as an option to the current distribution system? What are the key drivers?

The whole automotive industry operates through indirect sales at this point. The problem comes when the vehicle leaves the assembly line because we lose control over it. We cannot influence the final customer price and the vehicle has most likely already a discount when it leaves the factory. Furthermore, we do not have any direct contact with

the customer either. Actually, we do not know the customer at all. With direct sales, we would get a better access to customer data.

At this point, individual dealerships are independent entities. Due to the heavy regulation, it is very difficult to manage the distribution. Direct sales would enable us to steer the distribution process more effectively and most likely with lower costs. The profit distribution would then change to our favour.

No OEM can sell directly at this point, with the exception of Tesla. There is a consensus in the automotive industry that specialised entities are better at selling the vehicle than the OEM would be. We can influence the sales process through quality standards and other requirements, but we are not as good at sales as our dealers. This is one of the challenges of the direct sales for OEMs in the coming years.

When speaking about direct sales, OEM could sell its vehicles directly to the customer, neglecting any kind of intermediary. The most significant problem here would be that we would need to neglect our whole distribution network, which we have been building for the past 80 years. If that were the case, what would the role of the importers be? There are essentially two types of importers—one is an external company that is privately owned, which poses an enormous problem, since we cannot control them or cut them off at this point. The second type of importer is the NSC, which are owned by the OEM—those are relatively easy to control. They would eventually need to overtake part of the dealers' agenda—invoicing, back office processes etc. Furthermore, we could use an intermediary, such as a genuine or non-genuine agent.

When talking about direct sales, everyone keeps on repeating the same, that we should be like Tesla and sell our vehicles directly. But neglecting the dealers and the importer would mean losing the contact with the respective local market. That is something that cannot be replaced by a department in our HQ, we need local expertise.

The underpinning reason to change the distribution in some way is the level of uncertainty and unpredictability that the automotive industry is facing at this point. More control over the whole value chain gives me, as an OEM, more confidence. If the dealers are highly dissatisfied, there is no lever to control them. On the other hand, they cannot do business without us, so it is sort of a vicious circle. All the OEMs are starting to realise that we should be closer to the customer, but the primary motive is still the level of uncertainty arising especially from the newcomers to the industry, such as Apple or Google.

You have mentioned that the OEM does not have the sales know-how but still, you seem to be going for direct sales. Are you considering any specific model to overcome this?

Online sales are definitely one of the formats that is going to be crucial in the future within the direct sales distribution. This is not solely an automotive trend but it goes across all industries. In the context of automotive industry, online sales are at the very beginning, since Tesla is the only major OEM selling online on a larger scale. There are other examples, such as BMW UK, Hyundai UK etc.

But why direct sales? We see an opportunity to get closer to the customer. With online sales, you do not need to negotiate every aspect along the way. That simplifies the process for the customer and, moreover, we have a better control over the price.

Direct sales are however not as simple as they sound. Before the handover to the customer, the vehicle requires a check-up and, for example, all the liquids need to be filled. This is called Pre-delivery Inspection. PDIs will be however possible to conduct over the air for electric vehicles, as the vehicle is from the construction point of view much simpler. That would again simplify the process and a separate entity conducting the inspection would not be necessary.

OK, EVs do not require the PDI, but what about ICE vehicles? Who will conduct the PDI?

That depends on the way the OEM will decide to go, the mode of direct sales it will use. Let me answer the question from a broader perspective. There are two important components: sales and aftersales. We have realised that within sales, there are many arising opportunities—retail and fleet sales, mobility services etc. At this point, it makes sense to continue selling the vehicle to the retail customer through the traditional dealer network. Fleet vehicles, on the other hand, might be sold through specialised agents. Lastly, mobility services would be sold directly from the OEM. To be able to sell online (not considering fleet sales at this point), you need to combine online retail sales of EVs through an agent (ICE vehicles need the PDI and hence need to go through an intermediary) with direct online sales of mobility services. You need to create a consistent online presence but also to effectively combine two different channels. The decision has not yet been made, but the final setup of the distribution system will depend on whether we will use the current dealer network or not, and how their roles would change.

Eventually, the dealer must be used, as someone needs to hand over the vehicle, and it is necessary to allow the dealers to earn a reasonable amount of money. If you also consider the fact that the average number of dealer visits per vehicle purchase decreased from 3.5 around 2008 to about 1.5 today, it is clear that the dealers must get their fair share. The reason for the decrease is, however, the low perceived level of quality of service that the dealers provide, especially when it comes to prices. Customers get different discounts, which leads to dissatisfaction on the part of the customer.

There are more possible solutions as to who could conduct the final handover to the customer—a dealer, agent or a separate entity, which could even be owned by the OEM.

Does this mean that you would use delivery centres for handing over cars to new customers?

Not necessarily. If we aim to use the current dealer network, delivery centres are not necessary. On the other hand, if we use the agent network, we must avoid doubling the work. More than to delivery centres, the trend leads to delivering the vehicles directly to a location that the customer wishes. This itself leads to several additional questions. Dealers will be most likely the ones charging the customer with the delivery cost, however, what happens when the delivery man must wait longer than originally agreed? Who would cover the cost? The process needs to be as convenient as possible for the customer and offer a sufficient level of flexibility, but we need to describe many potential scenarios that might occur.

As to online sales, this needs to be discussed with each individual dealer. At this point, it seems that the majority of them are not interested in this, they might not see the value in it. As a result, a delivery service will be offered, but it has no fixed price and it is up to the individual dealer to set up the price.

When we look at the case of online sales of BMW UK, BMW uses the dealer network from a certain point in the purchasing process. Is this the same way your company aims to go?

BMW lets you configure the car and offers you stock vehicles that are most similar to your desired vehicle. This step is followed by a price negotiation with the dealer that you select. We do not know, however, what follows next, as you would need to purchase the vehicle to be able to see the process, and we have not done that. How does the financing work? That is a huge pain point of all automotive online sales.

At this point, we aim to offer online sales but only for leased vehicles because their price is constant, you do not need to negotiate and do not need to choose the financing type. At this point, we are not even sure whether the price negotiation part needs to be in the process or not for a purchase of the vehicle. We believe so, however, we did not get any specific answer from our legal department. When the customer specifies the vehicle, he/she is asked to choose a dealer for delivery, but it is eventually the dealer who is going to order the vehicle. The contract is then between the customer and the leasing company, the dealer is only an intermediary.

What are the most significant obstacles an OEM can face in the process of direct sales implementation?

Most importantly, legislatives. Among all, the block exemption regulation in the sense that we cannot compete with our dealer on the price level. Also, the current model is heavily tied with contracts among the stakeholders in the value chain. Moreover, there is a lot of uncertainty in the legal explanation of certain terms that are crucial for the specific model.

Another major obstacle is the level of capital that will be employed in the distribution in the case of direct sales. At this point, the vehicle is basically sold once it leaves the production line. In direct sales, the OEM (potentially importer) would be the owner of the vehicle up until the point of the handover to customer. Realistically, vehicles in the distribution are currently not owned by dealers themselves, but are financed through leasing companies with zero interest for a certain period of time. The difference comes, from the perspective of the leasing company, whether to lease tens or hundreds of vehicles or hundreds of thousands of vehicles in the case of OEM and direct sales.

Also, the complexity of the vehicle, especially for the European brands, is a strong limiting factor for the direct sales distribution.

We would also lose a push-ability to the market. At this point, at the end of a month, an importer picks up the phone and tries to convince individual dealers to buy additional vehicles to reach the sales target. Then the motivation to sell the vehicles obviously increases. If we go for direct sales, the push will significantly decrease.

Another major challenge are the IT systems that are necessary. At this point, the majority of the OEMs do not have a CRM system and do not know how to work with the customer effectively.

But what is eventually even more complicated for the OEM is the mind-set of many more senior managers, as they are used to do the business the old way and do not see the challenges and how serious they are. They believe the current purchasing process is the best way to purchase a vehicle. Some would like to do the transformation half-way, keeping the backdoor open, in case the transformation does not work out. My opinion is that this will never work and if we want to do this, we have to do this 100%. We need to be more radical.

This is where Tesla has a huge benefit compared to other OEMs, as they have designed their distribution strategy just recently from scratch, without any prior investment. Moreover, their competitive advantage is their product, which is very exclusive. On the other hand, at this point they can afford to sell vehicles directly, since it is a premium product and on a relatively small scale. Once they reach a certain level of production, they will need to use some sort of intermediary to be able to cope with the demand. Along with the current model, there might be another entity that has a higher motivation to close sales, since they are paid to do so, they are paid by commissions.

Pure direct sales can be therefore used only for very exclusive products. Not even Apple is able to handle its sales directly. They use a dual system. A good example of a successful direct sales model is Nespresso. The product is specific and for a very specific group of customers.

An interesting fact preventing the OEMs to implement the direct sales model is also the competitive advantage. If an OEM A implements direct sales, it will implement fixed prices and no discounts, which would be great for the OEM A, and potentially for some customers, however, OEM B could easily offer more appealing prices through the dealers (as it is today) and attract more customers just on the basis of a lower price.

Furthermore, it is interesting that at this point, we do not know how profitable the dealers actually are. Of course, we have reporting systems to tell us so, but they do not tell the true story, as the dealers tend to modify the information. This can be a fully legal tax optimisation but it still deteriorates our numbers. Without these numbers, we can never make a proper analysis and run scenarios on what the optimal solution would be, which presents a high level of uncertainty and unpredictability.

Which aspects of the current distribution network would you like to keep from the current model for the direct sales?

The crucial aspect is the proximity to the customer. When the customer wants to purchase the vehicle or just experience the brand, it is very easy for him to do so in his/her local dealership. The dealer represents the face of the OEM; however, the customer still purchases the vehicle from that particular dealer and hence enters into a relationship with him. In the view of the customer, he/she does not get the services from the OEM, but directly from the dealership, which will change in the case of direct sales. In the case of our own retail, there will be an enormous pressure on the OEM or importer to maintain the level of service quality, which must go down. The further the employees are from the decision-making centre, the less motivated they feel.

The network coverage is important; however, it will change due to the implementation of online sales. Then the arising question is whether people will want to buy vehicles in the same way they do today. Fewer customers will choose to purchase the vehicle and will rather go for an operative leasing or some sort of a sharing model.

Furthermore, we have not spoken about aftersales much, which is an aspect that definitely must be kept in the future. Aftersales is, however, much more complicated than sales and will probably never go direct.

You have already mentioned that one of the goals for the OEM is to create a brand experience through its sales location, basically substituting the role of the dealerships. Can this be done using brand stores, such as the ones run by BMW or Audi?

We are definitely considering formats like city stores. However, their role will be much different from the examples you have mentioned. Whereas BMW and Audi stores aim to create a strong brand experience, which is basically a marketing tool, we aim to provide the customer with all the information he/she needs, explain him/her everything he/she needs to know and, ideally, will sell something to him/her. As we extend our product line in terms of new models but also new services, the city store should serve as a one-stop shop for everything the customer might need.

The arising question is then whether to offer e.g. mobility services at our current dealerships, which might not be the smartest way to do it. For a specific target group, carsharing is much more interesting than car ownership and from that perspective it does not make much sense to sell them at the same location.

Appendix C: Transcript of interview with Automotive Industry Manager – EY Czech Republic (2017, 21 April)

Could you please first describe the pure direct distribution model?

The system is currently used by Tesla. With regards to new car sales, there is always an intermediary, such as a store, but it is always owned by the OEM. Even when sales of digital services are concerned, an intermediary is required to conduct the actual sales. It does not have to be an agent, it could be an intermediary that will conduct a particular activity, such as a test-drive or a vehicle handover. Theoretically, the intermediary could be the today's dealer, however, the contractual setting will be completely different from today. The intermediary will then be rewarded for the particular activity.

In general, the intermediary has to be there just from the perspective of the size of an OEM. It is typically a multinational company and the OEM could not conduct all the steps in the value chain.

How will the distribution model look like in the case of a “distributor as an intermediary” model?

Although the distributor will be managing the market, there would need to exist an intermediary. The need for the intermediary will however decrease, as, for example, less people want to do a test-drive before a purchase. Furthermore, today, the vehicle needs to undergo the PDI. The importance of the PDI will slowly decrease as it will be possible to conduct the PDI over the air, with no human interaction needed, thanks to the in-car connectivity and especially with the EVs, as they are technically simpler. Moreover, the PDI could be done centrally at one spot for the whole market instead of doing it at every single dealership.

What will the distribution model look like in the case of “distributor with Points of Sales” model?

This is basically the most common-sense option. Some of the brands are using this model for fleet customers and BMW, for example, is using it for its i models—they use the agent system. The underlining motivation for the OEM to implement this model is to be able to control the price. The arising problem is, however, the upcoming BER, due in 2022, that will basically forbid all the currently working business models.

How do you think the new BER will impact these business models?

At this point, it is hard to predict. The final version will not be completed until 2020. It seems that it is going to be very tough and will try to liberate the market to a serious extent. From the perspective of OEMs, it will be much harder to do their business, as they will lose control over many aspects of the distribution. A good example is connectivity. The main driver for the implementation of connectivity into vehicles was the European regulation requiring the installation of the E-Call system in each new vehicle. Although it might not seem that way, it required a huge investment on the part of OEMs and, therefore, they did their best to get their investment back. One of the services that was introduced was the predictive maintenance. Based on the vehicle data, the pre-selected dealer would be notified when the vehicle needs service or maintenance and the dealer could proactively contact the customer and offer him the particular service. Based on the new regulation, the data would have to be provided also to third parties, effectively meaning that everyone could profit from the data and contact the customer of the OEM.

How about the agent system in distribution? What is the major difference in a genuine and non-genuine agent?

Speaking about the agent system, it is important to distinguish between two types of agents: genuine and non-genuine agents. In the case of the genuine agent, the OEM takes over all the risks that are connected with the particular business and the OEM cannot even create a major cost item—e.g., marketing will have to be done centrally at the OEM. The agents get a very small commission since they do not take over any risks. It is, therefore, a very inflexible system from the perspective of an OEM. The major disadvantage is the motivation of the agent. In this setting, the agent has a very low motivation to do the sales or to provide the customer with a high level of service as he/she only gets a small commission with very low costs. They can lose the motivation to behave as a business. That is in general the most negative point of the direct selling model.

In the case of a non-genuine agent, the OEM gets much more flexibility. The agent keeps some of the business risks at his side and therefore also gets a higher commission for the service. The level of margin then determines the possible range for any discount the agent might provide to the customer.

In today's setting, dealers do not keep any margin at the sales, as their major profit stream is aftersales. The prices are, of course, influenced by the level of competition on the market.

If the direct sales model is implemented, it will add a significant amount of administrative work on the part of the OEM. Is it still profitable to do so?

Yes, this aspect is definitely being considered. There will certainly be a significant amount of additional costs. On the other hand, significant economies of scale are expected.

We can take an example of direct fleet sales that has already been implemented in two markets by an OEM. So, we know how many additional people were required to handle the additional workload. In the Czech Republic, an OEM has implemented this model but only for fleets larger than 35 vehicles. In this case, the OEM is handling this with no additional head count, as they use digital tools to help them with efficiency. On one hand, the OEM orders the vehicle and is technically an owner of it, but on the other hand, the dealer is handling the process, as it has the access to the system of the OEM. This is however only possible due to the large threshold of 35 vehicles, and there are not that many cases in the particular market.

Where a significant cost item could arise is the customer care. At this point, the dealer is basically doing all the customer care. In the event of a breakdown, the customer is not calling the OEM but the dealer. If the direct distribution model is implemented, or a customer has an issue with e.g. an app that controls his/her account with the OEM, he/she will much more likely call the OEM instead. All of that would require creating large customer care centres to handle the additional requests. Most of the additional costs would then be most likely carried by the distributor. Some of the digital products would be distributed directly from the OEM, but the majority would go through distributors and they would get a commission for that.

A good example is the Israeli market. Thanks to the lack of the European regulation system, they use the agent system for both fleet and retail channels. The model is working there well, however, on a very small scale, so it would need further scaling for it to be usable in the European market.

What is your view on the model that BMW uses in the UK in terms of online sales?

Their main motivation to implement this model is the BER, as it states that an OEM cannot compete with its dealers on any level. BMW UK uses the dealer network to negotiate the price and then carry out the rest of the process. The biggest disadvantage from the OEM perspective is the shared stock vehicles management. At this point, the

customer needs to go to several dealerships to find the best offer for the vehicle. With this model, the customer gets the offers immediately and can compare them almost in real time. This is obviously pushing down the margins. That is where the benefit of the direct selling model is, where the OEM can offer the customers both to configure the vehicle and choose from the stock vehicles. Then, however, the OEM gets itself into competition with the dealer network. The OEM can offer the vehicle only for the list price, which may be up to 30% higher than the dealer might be able to offer. The OEM is then completely unable to face this competition.

Furthermore, according to the new BER, the OEM cannot limit the dealers to sell the vehicle online on any channel. Interestingly, the OEM would not be able to limit anyone to sell vehicles online, even if they did not comply with standards or regulations. This goes basically against all that has been done in the automotive distribution for the past decades.