

A Work Project, presented as part of the requirements for the Award of a Master's degree
in Management the Nova School of Business and Economics.

AN ANALYSIS OF THE CURRENT STATE OF CAR DEALERSHIPS AND THE
DISRUPTIVE CHANGES CREATED BY DIGITAL TRANSFORMATION

FELIX CONSTANTIN STROH

Work project carried out under the supervision of:

João Nuno Lopes de Castro

17-12-2021

Abstract

The collective paper aims to analyze the current trends and challenges of the Automotive Industry and identify the main drivers of transformation within the sector. This part analyzed the current state of Dealerships and their transformation throughout the digitalization of the industry. The goal was to identify the main drivers of change disrupting the Dealerships in their current form of business. The findings of this paper indicate that Car Dealerships will play an essential role in the future of automotive retail, but not in their current form. Interactive showrooms enable a unique customer experience while Dealerships operate within an omnichannel framework. Data will be a key to understanding customers' preferences and needs, while the convenience of customers and the Personalization of processes must be the main priority throughout.

Keywords

Strategy, Automotive Industry, Automotive Retail, Car Dealerships, Digital Transformation, Omnichannel, Customer Experience, Disruptive Changes

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

1. Introduction

In 2020, 63.8 million cars were sold worldwide, with China, Japan, and Germany the most significant producers (Statista 2021). When looking at buying a vehicle, there are generally two ways of purchasing a new car: Online through the Manufacturer's Website or offline through a licensed Car Dealership of the OEM. In the last ten years, the dealer sector in Europe experienced a heavy change as the number of dealer outlets decreased by 16% to 52,000 across Europe (Engelskirchen 2020). In addition to that, online car sales have increased since the start of the pandemic. In China, the percentage of completed online sales increased from 15% in January 2020 to 25% in September 2020. India experienced the same increase in online sales, while in Germany, the number increased from 20% to 25% in September 2020 (Appendix I). Not only has the pandemic had an impact on the increase of online car sales, but also digital transformation. Especially in the automotive sector, it is one of the central drivers for disruptive change (Bernhart and Riederle 2020).

This paper identifies the current state of Car Dealerships and analyzes the disruptive changes created by the digital transformation within the automotive industry. The goal is to determine the main drivers that disrupt Car Dealerships and evaluate their importance in the future of automotive retail.

2. Theoretical Background

2.1. Car Dealerships

A Car Dealership is a local distribution point for vehicles. These businesses are primarily operated on a dealership contract with the car manufacturers or their subsidiaries and offer new and used cars at the retail level. At the Dealerships, salespeople introduce and sell cars to potential customers, while automotive technicians care for maintenance services or other technical issues (Ransom 2020).

The following paragraph explains the history of car dealerships and their evolution to understand their current position in the industry.

2.1.1. The evolution of car dealerships

At the beginning of the 20th century, the manufacturing of cars expanded and increased the demand for Dealerships and repair shops. Back then, the retailer took care of the customer's order and informed the manufacturer. Once the car was produced and delivered to the retailer, the salesperson forwarded it to the customer. As a response to the production increase, the manufacturers set up dealer networks and shipped their products to them. If the car was previously ordered, it went directly to the customer; if not, it became part of the dealer's inventory. This way of business caused problems for many dealers since they did not have the cash upfront to pay for the cars to store them in their inventory. The solution to this problem delivered General Motors in the year 1919 as it established a concept for dealers to finance their inventory. The Dealers compensated interest for having the cars in their stockpile and then paid out the loan once a customer bought it. This concept was primarily for retailers, but since the introduction of loans for end-users, the manufacturers also had to extend their financing plan to customers. In the auto's infancy, Car Dealerships were doing more than just selling cars. They taught customers how to drive, sold gasoline, or repaired vehicles. Over time, this business model has changed (Duckworth 2021) (McIntosh 2017).

The following paragraph analyzes the components of current Car Dealerships.

2.1.2. The Components of current Car Dealerships

Car Dealerships operate in 5 different components: New Vehicle Sales, Used Vehicle Sales, Service Operations, Parts, and Finance and Insurance. All these components will be further explained, but this paper will focus more on the new vehicle sales at Car Dealerships due to page limitations.

2.1.2.1. New Vehicle Sales

The most crucial function of dealerships is the offering of new vehicles. This process starts with the manufacturers who produce the vehicles and provide them to importers or National Sales Companies. These organizations then bring the vehicles to the Dealerships, either affiliated or accessible. Once the Dealers receive the vehicles, they can interact with the end customers, who can customize their car according to their preferences and order it at the Dealership.

However, new vehicles are not the only source of income for the dealerships; they are used as instruments to drive demand for other products or services within the Dealership. According to Mckinsey, shared mobility and autonomous vehicles will affect the volume of new vehicle sales negatively in the future. Shared fleets will lower the surplus on new cars and decrease the profits on finance and insurance products for the Dealerships (Inampudi, et al. 2019).

2.1.2.2 Used Vehicle Sales

Many dealerships sell many used cars, sometimes even more than new ones, as they have a much stronger appeal to specific customers due to their lower-Price. Comparing used and new vehicles identify complementation in marketing efforts, as customers seeking one of them are simultaneously potential customers for the other at the same time.

In addition, offering the option to trade in a used vehicle can promote the dealer's target as it attracts the traders to become customers while they trade in their old car (Carter 2015).

2.1.2.3 Service Operations

Service operations primarily generated revenue from work included in the warranty and therefore paid by the manufacturers or by repair and maintenance work, which is then paid by the customer itself, if not covered by any maintenance plan. As the quality of vehicles is continuously improving, it reduces the possibility for dealers to make revenues on repairs.

In general, the service operations at a dealership only account for a small amount of the total revenue, but in some cases can be significantly higher, depending on the Dealership and its core services (Carter 2015).

2.1.2.4 Parts

The parts section of a dealership has shown constant growth over the last years, selling replaceable parts to customers who need to replace damaged ones and offering additional parts from the manufacturer to customize the vehicle.

Offering new vehicles still draws the consumers to the Dealership, but the increasing demand in the possibility of changing the design afterward shows that selling parts can be a lucrative business (Carter 2015).

2.1.2.5 Finance and Insurance

After the consumers decide on a car in the dealerships, they must work on the paperwork, mostly the financing options. Since the introduction of loans and credits, lenders have been heavily involved in buying a car, providing liquidity for the customer. Nowadays, generating profits through finance and insurance products is more important to dealers than ever (Carter 2015).

2.2. Digital Transformation

The industrial revolution 4.0 or so-called "Digital Transformation" arises from the junction of "cloud computing, big data, IoT, and Artificial Intelligence" (Siebel 2019) and will create and use these technologies to perform tasks beyond human ability. It is described "as the power of digital technology applied to every organization" (Siebel 2019). It will be of great importance for newly created industries and the longevity of many long-existing sectors – as they need to transform as a whole to survive this revolution.

The new technologies that arise from this industrial evolution accelerate digital innovations that disrupt entire industries or ecosystems (Fichman, Santos and Zheng 2014).

Even in sectors where value is achieved over natural commodities, such as the automotive industry, digital transformation disrupts value creation (Yoo, Henfridsson and Lyytinen 2010) (Siebel 2019).

3. Disruptive Changes within the Industry

The digital transformation has significantly impacted the automotive industry – from vehicles to parts and services. Understanding and addressing these changes is crucial for the future of retailers. The traditional way of buying a car is dramatically changing. Customers have higher expectations regarding digital interactions and buying experiences and seek a more efficient way to buy their new vehicle. Looking at recent estimations, by 2025, around 25% of all car purchases globally will be done online (Afshar 2021).

Nevertheless, the offline channel should not be disregarded. To further understand the transformation of the Dealerships, the following analyzes the main changes.

3.1. Customer Product Search

Since the introduction of smartphones and the digital transformation, consumers have had access to large amounts of online data about brands, models, and pricing, which significantly impacts their decision process. 87% of shoppers search for products on digital channels (Alaimo 2018). Therefore, customers will inform themselves about their desired product before entering the Dealership, which decreases the need for in-person advice from the Salesperson and allows the consumer to become independent to some extent.

According to Deloitte's Global Automotive Consumer Study, the car-buying decisions of consumers are impacted most by the information available on manufacturer and dealer websites (Appendix II) (Bolger, Forchette and Santis 2019). Therefore, the websites must be user-friendly, easy to access, and informative for the customers.

3.2. Customer Data

Customers seek a personalized experience at the Dealership, and the Salesperson is responsible for understanding their customers' needs and delivering this experience in the best way possible. Through the digitalization of the process and the connectivity of offline and online channels, the dealerships already have access to necessary data from the customer before they enter the Dealership. Recent studies show that 95% of car buyers use digital channels as a source of information before entering a Dealership and that twice as many buyers start their search for a car online instead of at a dealership (Schueller 2017).

This proves that the Dealer's Website is a powerful tool to collect customers' data and assess their preferences and needs before they enter the Dealership (Wright 2020).

3.3. Omnichannel

Digital transformation impacts the way of purchasing a car. Dealerships now need an outstanding online presence to acquire customers through their online channels. It is of great importance for them to provide a consistent experience for the customers as they switch between sources of information. The Omnichannel approach seems to be the solution for companies to offer a seamless digital experience at all levels of the buying process.

As customers constantly switch between online and offline channels, they want to have a smooth transition in-between. They want to have their preferences carried across all channel boundaries, not repeat themselves. The distinctions between channels fade with the omnichannel approach, and the dynamics drive customer choice. Furthermore, price transparency becomes essential across all locations as online tools enable customers to access data about prices and compare them.

In addition, introducing financing options within the online sales process offers convenience to the customers and improves the efficiency of the process (Walton 2019).

3.4. Interactive Showrooms

To meet the steadily increasing expectations of customers, a combination of online and offline customer experience is of great importance. For this purpose, interactive showrooms are created. In these showrooms, significant investments in several consumer-focused digital technologies, such as tablets or smartphone-based product guides, or Virtual Reality applications, are made to configure their car according to their preferences. The showrooms must transform into an interactive space to increase customer engagement and experience and create a willingness for consumers to enter the dealerships (Kwanten 2021).

According to Deloitte, millennials and younger generations are more likely to such showroom experiences than the older generations, but they prefer to use their own mobile devices for these experiences (Bolger, Forchette and Santis 2019). The study also identified that premium car brand owners are more interested in digital showrooms than the average. 31% think that tablet devices are a great help while shopping at Dealerships, while only 21% of non-premium car owners think this way (Bolger, Forchette and Santis 2019).

Nevertheless, the offline experience should not be neglected. Test drives and evaluations of the vehicles are essential factors for many customers when visiting the dealerships and are barriers to online shopping. According to Deloitte's study, "75% of consumers want to see a vehicle before they buy and 64% require a test drive" (Kwanten 2021).

Therefore, Dealerships are still a vital part of a car's transaction. However, it is of great importance to offer a unique experience to customers with them being in the middle of the attention and focusing on convenience. The goal is to create a relaxing environment where customers enjoy an appealing showroom with comfortable furniture and digital possibilities to display personalized content such as music or videos. Perks such as welcoming beverages, a coffee bar, or scents can enhance the customer's experience by appealing to all human senses (Berg 2021).

To develop such showrooms, manufacturers need to work together with the Dealerships to create this new hybrid sales process by offering Dealerships the essential tools to create these new showrooms. (Bolger, Forchette and Santis 2019), (Blog 2019).

3.5. Configuration of the Vehicles

The car configurator is an essential part of the Manufacturer's e-commerce activities. Though, most configurators do not meet customer expectations. Users desire a configurator that focuses on their demands and offers simple navigation and intelligent recommendations powered by Artificial Intelligence.

Manufacturers need to overcome "the legacy tech trap and progress the future car configurator despite technical limitations" (Bonitz, Fuertsch und Wagner 2021). Digital Transformation has a significant impact here. It helps to improve the customer experience by enabling technologies like Virtual Reality or Augmented Reality that helps to digitally visualize the car in front of the customers without it being there (Bonitz, Fuertsch und Wagner 2021).

3.6. Acquisition & Negotiations

During the acquisition phase of the vehicle, the Salesperson and customer negotiate the Price – both to get the best deal possible. Since the digital transformation and accessibility of information for everyone, prices are fixed throughout the dealerships in the country, and there is little to no room for negotiations. On the one hand, this lowers the bargaining power for customers during the negotiations and prevents the Dealers from making an extra bargain on some customers who are not informed about prices.

Furthermore, keeping the prices consistent and all customer touchpoints such as online and dealerships enhances the customer's experience by improving transparency and integrity. Additionally, it lowers the need to have in-person negotiations, which only 38% of customers think are a reason to visit the Dealership (Kwanten 2021).

As of now, most Dealerships operate under an Indirect Sales Model as described in the individual part “Agency Model Impacts on Original Equipment Manufacturers’ Rent-a-Car Offering”. With this model the fixation of prices and its transparency is difficult to achieve, as the Dealerships operate on their behalf. The solution for achieving price transparency is the Agency Model, where the Dealerships act as agents on behalf of the Manufacturers and therefore the Manufacturers are enabled to fix prices throughout their Point-of-Sales. (Santos 2021).

According to Deloitte's study, most customers "dislike excessive paperwork and the overall length of time it takes to buy a car." Digital tools that can streamline processes are the solution here. An example of this could be algorithms that calculate the value of a used vehicle or digitalize all documents and introduce an "e-signing" tool so that no paper is needed anymore, improving the sustainability aspect.

Examples like this can significantly improve the overall shopping experience and simultaneously increase the likelihood of a sale as the time spent with "anxiety-inducing aspects of the purchase process" is reduced (Bolger, Forchette and Santis 2019), (Blog 2019), (Singh 2015).

3.7. Personalization

In a world with an increase in personalized products, the car buying experience at Dealerships needs to be personalized to each customer to be successful. Dealerships need to understand their customers by analyzing their data, which they are most likely to offer to receive a personal buying experience.

As Dealerships create a seamless omnichannel experience, they know their customers' preferences and online configurations once they enter the showroom. Everything at the showroom will appeal to the customers' needs and fulfill their desired experience. There will

be no other upselling process or paperwork, as the customers' decisions are well understood according to their data input.

The Personalization of the buying process will be essential to make each customer feel special when entering the Dealership (Light 2020). Technologies such as artificial intelligence are a great tool to drive Personalization. When looking at data, 6% of retail visits that included AI-powered recommendations based on customers' data drove 37% of revenue (Alaimo 2018).

The personalized experiences resulted in 4.5 times greater cart rate and five times greater spending per visit (Alaimo 2018).

4. Hypothesis

Based on the literature review Car Dealerships are evolving as follows:

1. Car Dealerships are shifting to an omnichannel approach as describes in chapter 3.3.
2. Customer Data is important to understand preferences and needs (see chapter 3.2.)
3. Customer experience and convenience becomes a main focus (see chapter 3.)
4. Interactive showrooms are key to attract customers as described in chapter 3.4.

5. Methodology

5.1 Data Collection

The qualitative research method is based on expert interviews based on the framework of a guided interview. This chapter focuses on the methodology of data collection and includes the basis of expert interviews, concepts of guided interviews, the choice of the experts, and the execution and documentation of the research.

5.1.1 Expert Interview

Expert interviews are defined by the specific selection and the interviewee's status. Based on the specific target group and the research focus on expert knowledge, they can be further

specified. The experts can act as counselors and broadcasters of knowledge who transfer their know-how and provide access to a limited area (Helfferich 2014).

5.1.2 Conceptual Framework of the Guided Interview

A guided interview provides a structured framework and a set of questions contributing to an overall problem or central question. The concept of the guided interview aims for fewer restrictions due to a high level of openness; while it remains a coherent structure to guide all interview participants towards the problem statement, it concludes with the principle "as open as possible, as structured as necessary" (Helfferich 2014).

The interview guide guarantees comparability among different interviewees along with similarly structured information. In addition to that, the structure of the interview guide mitigates the risk of a premature formation of opinion. It represents an operationalized and translated version of the central question and allows the interviewee to act within their expert role. The creation procedure of the guided interview focuses on realizing the purpose of the research without compromising the openness of the interview.

That requires collecting a broad spectrum of aspects towards the problem statement and leads to a validation process that ensures relevance and avoids inconsistency among the different aspects. The remaining aspects and questions are then sorted in a coherent and timely manner. Finally, the questions are grouped and summarized in different categories to address certain aspects better more directly (Helfferich 2014).

5.1.3 Selection of the Interviewees

The interviews are conducted with experts in the Automotive sector regarding retail and digital transformation. Both interviewees have been chosen by their knowledge and work experience within the Automotive sector and their retail and digital transformation knowledge.

As the topic is still in the development phase and the experts are still learning about it, it is not easy to find suitable interview partners. This paper focuses on quality rather than

quantity, so the number of interview cases is 2. For the sake of simplicity, the Interviews have been conducted in German and been translated afterwards.

5.1.4 Execution and Documentation

The method is based on the rule propositions by Kuckartz and further modifications by Dressing and Pehl. The experts participating in the research receive the interview questions before the interview so that the experts can prepare for the interview and ask questions before the start. All experts are provided with the same questions from the guided interview to enhance comparability (Appendix III). The respective time frame for the interviews is set around half an hour and was communicated prior to the meeting.

The interviewee is informed about the purpose of the interview (Dressing und Pehl 2018) (Kuckartz 2010). The Experts and any mentioned company are anonymous. For documentation and evaluation purposes, the recorded interviews are transcribed (Dressing und Pehl 2018), (Kuckartz 2010). The main findings of the interviews are summarized and stated in Chapter 6. The full interview cannot be disclosed due to the Non-Disclosing Agreement.

5.2 Qualitative Content Analysis and Data Evaluation

The analysis and evaluation of the interviews align with the research question, which is to be solved based on the expert interviews. The transcribed interviews, including the answers to the guided interview questions, provide the basis for the analysis. The analysis and evaluation are going to be conducted based on the qualitative content analysis (Mayring und Fenzel 2014).

5.3 Results

The results from the expert interviews derive from the content analysis. They are categorized and coded with the tool MAXQDA by several factors that are important for the hypothesis based on the literature review. Each category of the findings will be described and put into context related to the literature review. The interviews either confirm or contradict the hypothesis from the literature review.

6. Findings (Interviews)

This chapter of the thesis presents the findings of the primary research conducted with two experts. The first interview partner is an expert in the retail sector of the “Porsche AG” and the second expert works within the retail department of the “BMW AG”.

As stated before, the interviews were conducted anonymous, and the full report cannot be disclosed due to the Non-Disclosure Agreement. The interviews have been transcribed, coded, and analyzed according to the hypothesis stated in chapter 4.

1. The first hypothesis states that Car Dealerships are shifting to an omnichannel approach. Interview partner #1 confirms this shift and states that it is crucial to address customers and target groups at the right time with the right content (Interview #1, personal communication., 09.11.2021). He furthermore mentions that it is vital to connect online and offline to move the customers continuously one step further in the direction of purchase or into the Dealership.

The Omnichannel approach is key to building a seamless transition from online to offline to the retailer (Interview #2, personal communication., 12.11.2021). Nevertheless, Omnichannel is not only a structure, but it is also a way of thinking. Retailers must think in an omnichannel way and understand how to make things easier (Interview #2, personal communication., 12.11.2021). Furthermore, the Omnichannel approach allows price Transparency which is important “to get a price harmonization, so that the car costs roughly the same in all markets” (Interview #2, personal communication., 12.11.2021).

According to Interview partner #2 the price then becomes not decisive because it is the same everywhere and the customer “has a good feeling” about it, as the transparency builds is an important trust factor (Interview #2, personal communication., 12.11.2021).

2. Based on the literature review, the second hypothesis states that customer data is important to understand their preferences and needs. According to expert interview #2, the more data the retailers have about their customers, the better they can advise them, so investments into data management and online channels are significant (Interview #2, personal communication., 12.11.2021).

Interview partner #1 confirms this statement saying, "the biggest investment is in data and individualization." (Interview #1, personal communication., 09.11.2021). Still, data management has some challenges, as managing customer data across the manufacturer and retailer levels simultaneously can be difficult. The solution here would be an agency model because both products and data belong to the manufacturer and are used by the agent (Interview #2, personal communication., 12.11.2021).

3. The third hypothesis states that customer experience and convenience become a main focus in the automotive retail sector, especially Dealerships. Personalized content must be available at each touchpoint according to customer behavior and needs, and the "retail should be an experience, so the customer feels at home" according to interview partner #1 (Interview #1, personal communication., 09.11.2021).

Interview partner #2 again highlights that dealerships' customer experience and convenience are important factors. The customer decides if they want to come to the Dealership, which is part of the convenience the dealerships should offer. If they decide to come, a good experience should be waiting. (Interview #2, personal communication., 12.11.2021).

4. The fourth and last hypothesis implies that Interactive showrooms are the key to attracting customers and offering them the needed experience. According to interview partner #1, there will be several showrooms to address different target groups in the future. The manufacturers are redesigning their dealerships with a new concept and a digital anchor,

including interactive touchpoints and different content at each touchpoint (Interview #1, personal communication., 09.11.2021).

These new showrooms will create the desired experience for the customers by having "a coffee lounge, nice furniture, music, fragrances" in order to appeal to all senses in the Dealership so "that the customer feels comfortable and says yes, this is really a destination." (Interview #1, personal communication., 09.11.2021).

Interview partner #2 confirms this hypothesis and explains the interactive showrooms further. They will have comfortable furniture, offer beverages and personal consultation on the vehicle. The car will be visualized and configured on a big screen, so the customer enjoys the best experience possible (Interview #2, personal communication., 12.11.2021).

With regards to the business model of the showrooms, Interview partner #2 explained that the number of cars within Dealerships is also changing. "The dealer does not need a showroom, where 10, 15 vehicles are in it, but then maybe only has two or three in it and does the rest virtually". Another way of showrooms will be "Urban Pop-Up Stores" where people can have a coffee, do co-working, eat something, or just have a look at the cars.

The goal is to offer access to this "lifestyle. And the car is part of what lifestyle is called" (Interview #2, personal communication., 12.11.2021).

7. Conclusion

This paper aimed to analyze the current state of car dealerships and their transformation throughout the digitalization of the industry. Based on literature review and qualitative analysis in the form of expert interviews, it can be concluded that the model and importance of Car Dealerships is changing. With the rise of online retail, Car Dealerships need to offer more than just selling cars to their customers. Showrooms are re-developed to offer an interactive customer experience to increase the customers' willingness to enter the Dealership.

Furthermore, customer data is more important than ever. Dealerships need to understand their customers' needs and preferences by collecting personal data along the customer journey. Using an omnichannel approach is key to a seamless transition between online and offline channels.

In addition, the Personalization of products and processes becomes the primary metric, while the customers are always at the center of attention. The overall goal is to simplify the buying process at Dealerships while increasing convenience for customers at all stages. Overall, this paper identified four main drivers of change that disrupt the Car Dealerships. Most manufacturers invest heavily into their Dealerships to re-develop them and increase the customer experience and convenience along the buying process.

Furthermore, through the digitalization of the showrooms and the introduction of the omnichannel approach, Dealerships will likely play an essential role in the future of car buying. A hybrid approach between offline and online channels will be the key to succeed in the industry.

8. Limitations

Due to the focus on new vehicle sales, a deeper analysis of the other Dealership components and the overall business model could not be conducted. Therefore, the findings are only limited to the scope of new vehicles. The usage of other qualitative research methods such as surveys did not seem helpful due to the expert knowledge needed to identify and analyze disruptive changes. Furthermore, the use of only quantitative data would not lead to the desired results, and therefore the possibilities of research were limited to expert interviews.

It was challenging to find suitable interview partners, as they should work within the automotive industry, preferably at one of the leading manufacturers or their Dealerships. Several potential interview partners were contacted, but only a few responded, from which only two were able to share their knowledge and give some insights into their processes. The

interviewees were also limited with their insights due to trade secrets. In addition to this, the literature review showed some limitations with the availability of sources; most of the information is derived from articles or studies, as most books did not cover this specific topic.

9. Future Work

To better understand the implications of these results, future studies could address the development of other components of Car Dealerships and investigate the change of the overall business model. A more focused approach to specific applications within the showrooms and primary research about consumers preferences can offer more insights into the future of retail. Furthermore, an analysis of electric vehicle companies such as Tesla could offer new insights into the future of car retailing.

References

- Alaimo, Dan. 2018. *87% of shoppers now begin product searches online*. August 15.
<https://www.retaildive.com/news/87-of-shoppers-now-begin-product-searches-online/530139/>.
- Bernhart, Dr. Wolfgang, and Stefan Riederle. 2020. *Autonomous mobility is coming. Not even the coronavirus can stop it*. Munich: Roland Berger GmbH.
- Blog, Automotive Tech. 2019. *5 Ways Digital Transformation Impacts Car Dealerships*. September. <https://www.fpt-software.com/5-ways-digital-transformation-impacts-car-dealerships/>.
- Bolger, Dan, Ethan Forchette, and Christopher de Santis. 2019. *How digital technologies can elevate the car-buying experience*. January 04.
<https://www2.deloitte.com/us/en/insights/industry/automotive/digital-technologies-transform-car-buying-experience.html>.
- Bonitz, Kristina, Timo Fuertsch, and Michael Wagner. 2021. "Future Car Configurator." *Experience first: The future car configurator*. <https://www.accenture.com/us-en/insights/automotive/experience-first-future-car-configurator>.
- Carter, Bradley R. 2015. *An introduction to automobile dealerships*.
<https://www.thefreelibrary.com/An+introduction+to+automobile+dealerships.-a0430717148>.
- Dresing, T., and T. Pehl. 2018. *Interview, Transcription & Analysis - Guides and Rules for qualitative research*. Marburg: self-publisher.
- Duckworth, Rebecca. 2021. *Automotive World*. September 21.
<https://www.automotiveworld.com/articles/automotives-evolution-is-dealerships-opportunity/>.

Engelskirchen, Dr. Christof. 2020. *What is in store for Europe's car dealers?* October 30.

<https://autovista24.autovistagroup.com/news/what-store-europes-car-dealers/>.

Fichman, R.G., B.L. Dos Santos, and Z. Zheng. 2014. *Digital innovation as a fundamental and powerful concept in the information systems curriculum*. MIS.

Helfferrich, C. 2014. *Manual of methods of the empirical social research*. Wiesbaden: Springer Verlag.

Inampudi, Srikant, Nicolaas Kramer, Inga Maurer, and Virginia Simmons. 2019. *As dramatic disruption comes to automotive showrooms, proactive dealers can benefit greatly*.

January 23. <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/as-dramatic-disruption-comes-to-automotive-showrooms-proactive-dealers-can-benefit-greatly>.

Kuckartz, U. 2010. *Introduction to the computer aided analysis of qualitative data*.

Wiesbaden: Springer Verlag.

Light, Larry. 2020. *Forbes*. November.

<https://www.forbes.com/sites/larrylight/2020/11/02/personalization-will-change-your-car-dealership-experience-forever/?sh=635d23e56e9f>.

Mayring, P., and T. Fenzel. 2014. *Manual of methods of the empirical social research*.

Wiesbaden: Springer-Verlag.

Ransom, Kevin. 2020. *Autoblog*. March 20. [https://www.autoblog.com/2008/02/29/how-a-car-dealer-is-](https://www.autoblog.com/2008/02/29/how-a-car-dealer-is-run/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmRILw&guce_referrer_sig=AQAAAMjnKI2gXZudSSVUjQpOYHowY48dBUBwe1qb-77rCtKueV2WFYnUiUBXSqPKETu2hdrwv9LZcLU-174Kdto2iUNxU5UuiW-PXBPZiy_RA3PIWwAUSN)

[car-dealer-is-](https://www.autoblog.com/2008/02/29/how-a-car-dealer-is-run/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmRILw&guce_referrer_sig=AQAAAMjnKI2gXZudSSVUjQpOYHowY48dBUBwe1qb-77rCtKueV2WFYnUiUBXSqPKETu2hdrwv9LZcLU-174Kdto2iUNxU5UuiW-PXBPZiy_RA3PIWwAUSN)

[run/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmRILw&guce_r](https://www.autoblog.com/2008/02/29/how-a-car-dealer-is-run/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmRILw&guce_referrer_sig=AQAAAMjnKI2gXZudSSVUjQpOYHowY48dBUBwe1qb-77rCtKueV2WFYnUiUBXSqPKETu2hdrwv9LZcLU-174Kdto2iUNxU5UuiW-PXBPZiy_RA3PIWwAUSN)

[eferrer_sig=AQAAAMjnKI2gXZudSSVUjQpOYHowY48dBUBwe1qb-](https://www.autoblog.com/2008/02/29/how-a-car-dealer-is-run/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmRILw&guce_referrer_sig=AQAAAMjnKI2gXZudSSVUjQpOYHowY48dBUBwe1qb-77rCtKueV2WFYnUiUBXSqPKETu2hdrwv9LZcLU-174Kdto2iUNxU5UuiW-PXBPZiy_RA3PIWwAUSN)

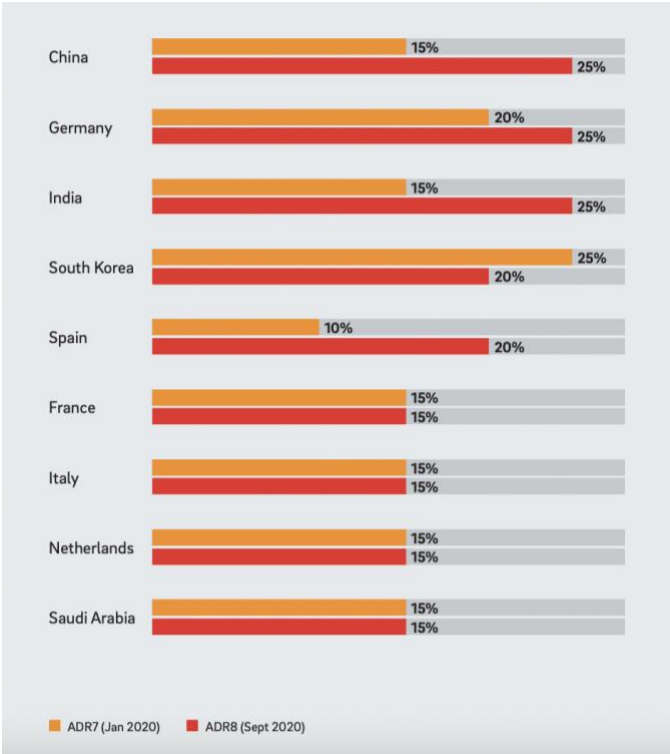
[77rCtKueV2WFYnUiUBXSqPKETu2hdrwv9LZcLU-174Kdto2iUNxU5UuiW-](https://www.autoblog.com/2008/02/29/how-a-car-dealer-is-run/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmRILw&guce_referrer_sig=AQAAAMjnKI2gXZudSSVUjQpOYHowY48dBUBwe1qb-77rCtKueV2WFYnUiUBXSqPKETu2hdrwv9LZcLU-174Kdto2iUNxU5UuiW-PXBPZiy_RA3PIWwAUSN)

[PXBPZiy_RA3PIWwAUSN](https://www.autoblog.com/2008/02/29/how-a-car-dealer-is-run/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmRILw&guce_referrer_sig=AQAAAMjnKI2gXZudSSVUjQpOYHowY48dBUBwe1qb-77rCtKueV2WFYnUiUBXSqPKETu2hdrwv9LZcLU-174Kdto2iUNxU5UuiW-PXBPZiy_RA3PIWwAUSN).

- Schueller, Guy. 2017. *The auto dealer's guide to moving metal in a digital world*. December. <https://www.thinkwithgoogle.com/consumer-insights/consumer-journey/auto-digital-retail-trends/>.
- Siebel, Thomas M. 2019. *Digital Transformation: Survive and Thrive in an Era of Mass Extinction*. Modern Language Association.
- Singh, Sarwant. 2015. *Forbes*. <https://www.forbes.com/sites/sarwantsingh/2015/06/02/future-of-automotive-aftermarket-and-car-servicing-consumers-will-have-more-channels-to-shop-around/?sh=3b9a10e927f8>.
- Statista. 2021. November 15. <https://www.statista.com/statistics/200002/international-car-sales-since-1990/>.
- Walton, Dr. Bryn. 2019. "Deloitte: Disruption in the automotive industry." <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/ConsumerIndustrialProducts/deloitte-uk-consumer-industrial-products-how-digital-is-changing-car-sales.pdf>.
- Wright, Alex. 2020. *Technology is finally tackling car dealers' customer data challenges*. April 03. <https://www.am-online.com/news/dealer-news/2020/04/01/car-dealer-tools-to-understand-customers-better>.
- Yoo, Y., O. Henfridsson, and K. Lyytinen. 2010. *Research commentary: the new organizing logic of digital innovation: an agenda for information systems research*.

Appendix

I. The number of cars bought through online sales channels in 2020



Source: Roland Berger Automotive Disruption Radar online survey

II. Percent of buyers that rated each information source highly (4 or 5) on a 5-point scale.



Source: Deloitte Global Automotive Consumer Study, 2018.

III. Questionnaire Interviews

1. How would you describe the most important sales channels in the automotive industry?

2. Where do you see the biggest change in the last years or decades?
3. What are the benefits of an Omnichannel model in terms of the car buying process?
4. How would you describe the transformation of Dealerships in recent years and is the Dealer network still an essential part of the sales channels?
5. In your opinion, has digital transformation affected the process of buying a car? If so, how?
6. How has digital transformation affected your work and what adaptations have you made to be a "leader" in terms of sales channels?
7. Have you introduced technologies such as Virtual Reality or Artificial Intelligence as part of the digitalization? If so, how have these technologies enabled you to make the process more efficient and where do you see more potential in the future?
8. Are you still building on Dealerships in the future or are you focusing on online sales only?
9. The trend is partly towards interactive showrooms, what is your opinion on this? Should the dealerships offer the customer an interactive experience during the buying process?
10. How can dealerships create this interactive experience? What technologies play a big role here?
11. Manufacturers should work closely with their dealerships to ensure a seamless transition from online purchase to the showroom. Where do you still see the biggest problems here, or what would be the most sensible approach to solving them for you?
12. Do you think that dealerships will die out in the future, or will customers insist on the offline experience? And if so, why?
14. what do you think would be the most sensible way to ensure the best possible buying experience for the customer? A combination of online and offline or online only?
15. In which areas of retail should manufacturers invest in order to be a "leader" in the future and to master digitalization?