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The use of digitalization and technology in the business processes of automotive luxury companies and how it affects the performance on the market: the Jaguar Land Rover Case

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INTRODUCTION

The automotive sector encompasses various areas ranging from marketing to design, including manufacturing and sales. This industry is in constant evolution. Since its inception over a hundred years ago, vehicles have undergone revolutions in appearance, technology, and the sales process.

The luxury car segment is a competitive and lucrative sector, characterized by superior performance, advanced features, and high-quality materials. The demand for luxury cars is driven by factors such as rising disposable incomes, urbanization, and a growing preference for luxury and comfort.

The automotive industry is undergoing a profound transformation driven by digitalization and disruptive technologies. This transformation is redefining not only the vehicles themselves but also the entire automotive ecosystem. Key trends include electrification, connectivity, shared mobility, and servitization, collectively referred to as C.A.S.E.S. (Connectivity, Autonomous driving, Shared-mobility, Electrification, and Servitization). A shift toward direct-to-consumer strategies and shorter value chains is expected, requiring expertise in customer relationship management (CRM), data integration, and digital channels.

Dealerships need to adapt to evolving customer preferences by embracing e-commerce, digital touchpoints, and omnichannel strategies. Emphasizing the customer experience through sensory elements and personalization is crucial. Suppliers play a pivotal role in the industry's transformation, particularly in electrification and connectivity. They must focus on value-added software components and digital features, restructuring their business models to align with emerging market demands.

However, for luxury sector like the automotive one, the primary challenge lies in delivering exceptional quality that adds value to the end customer, particularly when confronted with constraints on resources and cost pressures. Furthermore, the future trajectory of luxury automotive companies is being shaped by challenges such as changing consumer preferences, technological advancements, and government regulations related to emissions and safety standards.

This study focuses on the understudied luxury segment of the automotive industry and addresses a literature gap by examining digitalization tailored to luxury automotive companies. The research aims to explore how the adoption of digital tools and technologies influences various aspects of an automotive luxury company's business operations, particularly in marketing, network management, and customer service.

The structure of this thesis is as follows: the first chapter involves comprehensive research conducted through reports, publications, and articles within the automotive sector. Following the identification and definition of the luxury segment within the automotive industry, the analysis delves into a detailed examination of emerging trends. It provides an in-depth exploration of the connection between the current market dynamics and the integration of the digital realm into the luxury automotive sector.

In the second chapter, a review of relevant scientific literature is conducted, highlighting the pivotal role of Customer relationship management. This involves leveraging insights from customer data with the use of

digitalization to create personalized marketing campaigns, thereby enhancing customer experiences and fostering loyalty. Digital technology has revolutionized supply chain management in the automotive industry, offering benefits like efficiency and transparency. Disruptive technologies, such as blockchain and Big Data, have introduced new possibilities. Robotics and AI demand trust calibration to ensure appropriate reliance and safety in human-robot interactions. Furthermore, the emerging of digital platforms has brought together manufacturers, suppliers, dealers, and customers into a single online ecosystem, enabling seamless interactions and transactions. Emerging technologies like augmented reality, virtual reality, and live chats are expected to play an increasingly important role in customer interactions, alongside social media, comparison portals, and independent new car platforms. Lastly, the specific case of Jaguar Land Rover is introduced as the focal point of this study, accompanied by a thorough justification for its selection as the primary case study.

In the third and last chapter, detailed information are presented concerning the interviews conducted using quantitative analysis, with an emphasis on the application of the Gioia methodology for data interpretation. Following this, a meticulous data analysis is undertaken to delineate the scientific and managerial implications derived from this research. All the interpretations have been illustrated in the “data structure “table, and a meticulous data analysis is undertaken to delineate implications derived from this research.

CHAPTER I: THE DIGITALIZATION IN THE LUXURY-CAR MARKET

1.1 Theoretical background about digitalization

The world is constantly evolving and the innovations of the last two decades have characterized this period, paving the way for new ideas and knowledge. Individuals are constantly immersed in environments where information and countless data concerning a multitude of relevant issues circulate easily. The application of digitalization in everyday life has profoundly revolutionized the way we interact with the world around us. Thanks to the numerous available digital technologies, we can harness a wide range of tools and resources that simplify and enhance many aspects of our existence. From the way we communicate and obtain information to the management of daily activities, and even accessing global services and opportunities. The pervasive influence of digitalization has prompted the creation of a designated label for the generation born and raised in the digital era: Generation Z. Remarkably, this generation represents the first to have exclusively experienced a life immersed in digital technologies and environments, thus blurring the once significant demarcation between the online and offline realms, as well as between tangible reality and virtual existence (Meret, 2018).

Digitalization has given rise to a second universe in which all individuals are immersed, and observing the rapid evolution of the phenomena, new generations need to be ready to take part in this new perspective characterized by new ways of interacting and managing business and customs. The exponential growth of social network use, the widespread adoption of smartphones, the evolution of data transfer performance guaranteed by mobile internet networks, and the cloud are just some of the examples characterizing this new dimension.

Before moving on, it is important to clarify a relevant distinction between digitization and digitalization too often ignored. The two concepts previously mentioned appear similar in terms of meaning, however they refer to two separate dimensions. Firstly, we will rely on Gartner's IT Glossary in order to get a first view of the term digital, defined as "the concept of shifting from mechanical and analogue electronic technology to digital electronics, able to represent whatever kind of information through numbers" (2022). Following the reasoning, "digitization" refers to the simple phenomena of shifting analog form to digital one. Indeed, its practical implications are quite simple: for instance, the scanning process of a photograph.

On the contrary, when it comes to explaining digitalization, this is less intuitive and requires an additional analysis as it is not used with reference to many domains of social life. In the business context digitalization is defined as the use of digital technologies and of data in order to create revenue, improve business, transform business processes and create an environment for digital business, whereby digital information is at the core (Clerck, 2017). As the definition reports, not only the phenomenon of digitalization revolutionizes the business in order to increase revenue, but it also embraces the whole set of processes and mechanisms that improve

internal business operations and facilitate, for instance, the sharing of information and data between different areas of a company.

In other terms, digitalization can be described as generation and use of data finalized at achieving two specific goals: the efficiency of a firm and its added value for customers through the passage from analog to digital formats (Gartner IT Glossary, 2023). The collection of information and its consequent combination with different knowledge coming from the outside is particularly important as it allows the realization of new perspectives for the organizations.

In the reflections carried out, the business is conceived not only as a system capable of generating profit in the long term, but as a real ecosystem that embraces all the dimensions that compose it, namely the stakeholders. "In business, a stakeholder is any individual, group, or party that has an interest in an organization and the outcomes of its actions. Common examples of stakeholders include employees, customers, shareholders, suppliers, communities, and governments" (Corporate Finance Institute, 2023).

From this perspective, technological advancement and in particular digitalization are elements that must be able to generate positive output also on other dimensions, in addition to the purely economic one.

Differentiating how business communicates with clients and partners, modifying internal operations and developing new distribution channel opportunities in terms of sustainability are some examples of how digital applications can be implemented to all the actors involved in the life of an organization (Averina & Barkalovl, 2021). The application of technology and digital tools aims at directly changing the business model, defined as the business strategy developed by each company in order to create and establish value for both stakeholders and the business itself (Bouwman. et al., 2017).

"Digitalization requires us to rethink – or at least rework – our current business models. But digitalization can also give rise to entirely new and disruptive approaches. What many successful young companies have in common is their consistent focus on customer value and the use of superior software platforms which enable them to attract a very large number of customers very quickly" (Châlons & Dufft, 2017).

By examining the effects of digital transformation, it is possible to realize that historically, the main drivers of the first two industrial revolutions, the steam engine, electricity and printing press (between 1760 and 1840, and between 1850 and the first decade of 1900, respectively)

have resulted in such significant changes to the global environment (Mühleisen, 2018).

The literature defines revolutions as Schumpeterian creative disruption battles that bring about radical changes in power or organizational structure by introducing new input, new products, new industries, new infrastructure, and new modes of transporting goods, people, information, and alternative energy sources (Perez, 2002). Considering it as an "information-centric" revolution, digital transformation is frequently

defined in this sense as the Third Industrial Revolution, whose starting point can be identified in the second half of the 20th century.

The integration of various technological advancements has propelled us into an era characterized by the rapid development and implementation of new trends that have significantly reshaped traditional lifestyles and business practices. For instance, we can think of the world of Artificial Intelligence, which embraces several technologies capable of simplifying tasks and work as human intelligence, lowering the need for human capital as well as time-loss in daily operations. The automotive sector is the emblem of how Artificial Intelligence has radically changed and improved efficiency at every step of the product life cycle, in terms of manufacturing, transportation and service (Antoniali et al., 2022).

Brand avail of AI Technology at every stage of the product life cycle

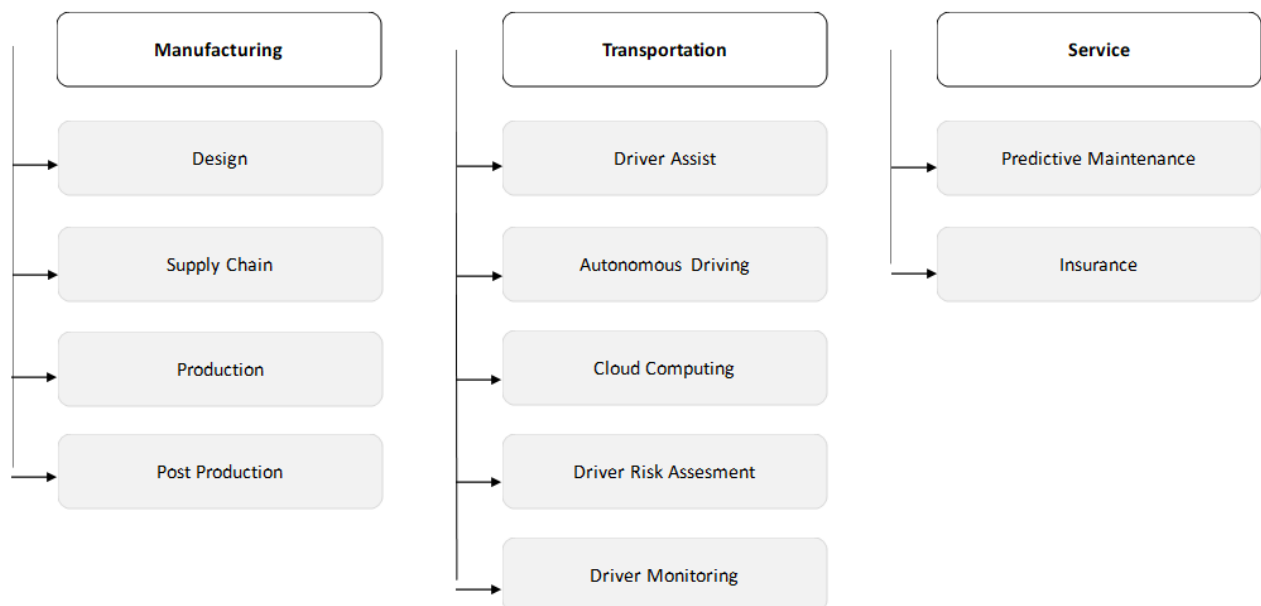


Table 1. Elaboration of the author about the application of AI Technology (source: FutureBridge Analysis and Insights, 2023)

On average a car consists of around 30,000 different parts which come from separate manufacturers spread on a global scale. In addition, complications in the manufacturing process as well as increasingly difficult access to skilled and qualified workers make the possibility to occur in delays very often. Artificial Intelligence can offer a solution by predicting interactions and automating assembling processes for example.

The building of a working environment where there is the co-presence of robots working and people has enhanced work on the production line and increased efficiency, reducing the risk of danger. It is only with the

spread of Artificial Intelligence in the automotive sector that new devices capable of moving elements, performing tests and assembly of different materials have been developed (Khayyam, et al., 2020).

Businesses are under relentless pressure to apply digital technologies to renew and transform their business models (Kohli & Melville, 2019). The adoption of digital tools and technological processes undoubtedly has many positive effects on the organization's performance and core business, but there are also costs and risks involved that must be considered before making any changes.

Companies in today's society have a consistent tool in their hands; obviously digital has the ability to be shaped and adapted to the most heterogeneous contexts and objectives, taking on completely new meanings according to the needs of the business.

1.2 Overview of the luxury-car segment

The luxury car industry is a segment of the automotive industry that focuses on high-end, high-performance vehicles.

To support the analysis, a report on the new realities of future premium mobility will be taken into consideration and it will be necessary to reflect on how the term premium is interpreted by the study taken into account. As a matter of fact, it is important to highlight that In the automotive industry, the “premium” designation is subject to multiple interpretations—not least because the very concept has evolved. The premium segment sits between mass-market vehicles (commoditized, entry-level, valuedriven cars) and luxury vehicles (the top end of performance and craftsmanship) (Köstring, et al., 2019). In this case, the research can rely on this report using the interpretation of premium mobility as luxury vehicles that perfectly represent characteristics such as performance and craftsmanship.

Premium refers to a market of the car industry where comfort, performance and experience are beyond and higher than what it can be found in the mass-market segment and for what customers are willing to pay much more. As a matter of fact, the premium automobile is characterized for its car buyers. The features like design, engineering and sophistication of top-quality cars induce perennial interest in car buyers as well as strong brand loyalty during the years. It is a highly competitive and lucrative sector where cars are characterized by their superior performance, advanced features, and high-quality materials. The demand for luxury cars is driven by factors such as rising disposable incomes, increasing urbanization, and growing preference for luxury and comfort. In a report about forecasts for the global consumption of personal luxury goods published by Altgamma (2022). it is clearly shown that looking at the 2030, luxury brands need to elevate their power by enhancing their excellence that make them unique, and overcoming challenges by direct investments where the opportunities are concentrated, such as technology and data.

Surely COVID-19 pandemic cannot not be mentioned, as it has brought to life new challenges for companies, and the luxury industry not emerged untouched (Bain & Company, 2021). To describe the emerging context,

a disruptive expression has been coined: the New Normal. The New Normal is an era full of challenges and instability. In this era agility, curiosity, risk mitigation, learning by exploring, learning by doing, and focus, are highly expected (Buheji & Sisk, 2020). For instance, companies operating in the luxury car sector have seen the rise of new customers' needs, higher expectations in terms of innovation and an increasingly demand for tailored and hyper-personalized customer experience. Even if all segments of luxury market have been dramatically affected by pandemic, the industry was able to emerge from the crisis stronger, more resilient and more agile than ever. (Bain & Company, 2021).

In recent years the automotive market is undoubtedly one of the most vibrant segments in the luxury goods market, experiencing high growth in the emerging economies such as China, India, and Brazil (Dash & Sharma, 2019), and undergoing radical changes such as the popularity of electric and hybrid vehicles as a result of trends in technology and shifts in consumer preferences. The rapid growth of the Chinese population and the fact that China is on path to become the biggest luxury market globally are two of the four growing trends expected for 2025 (Deloitte, 2021).

The overall world of luxury has been defined by Bain & Company under nine segments; within these nine, luxury cars, luxury hospitality and personal luxury goods account for 80% of the total market in 2021.

Data show that revenue in the luxury car segment is predicted to reach US\$20,910.00m in 2023, with an expected annual growth rate of 2.63% (CAGR 2023-2027) (Statista, 2023).

Moreover, in United States, China and Europe car sales may rise by 30% by 2030 (PricewaterhouseCoopers, 2017).

Indeed, for manufacturing industries such as automotive, delivering value to the final customer through superior quality is the major challenge to overcome, especially if there is a lack of resources in the lifecycle and a cost pressure (Stylidis & Madrid, 2017). Moreover, other challenging factors exist such as changing consumer preferences, technological advancements, and government regulations related to emissions and safety standards that are shaping the future of premium car market.

1.3 What defines a luxury car.

Before delving into the emerging digital and technological trends in the automotive luxury sector, a brief digression is required to describe in detail the unique characteristics that distinguish a luxury vehicle from a traditional vehicle. In other words, the associations and key components connected to the world of luxury cars. Starting from the general, the word luxury has its origin from latin, with the term "*lux*" meaning light, magnificence (Kastner, 2014). A more recent definition by author Yajin Wang (2021) explains luxury as “expensive and exclusive products and brands that are differentiated from other offers based on their exquisite design and craftsmanship, sensory appeal, and distinct socio-cultural narratives”.

Mentioning the analysis carried out by the author Keller, the study can be traced back to what are the peculiarities of a luxury car, such as premium price, exclusive quality, heritage and excellence in terms of performance. Alongside these, there are also the peculiarities associated with the hedonic and symbolic dimension, such as the essence of experience, and the definition of the individual identity (Keller, 2009). Indeed, luxury goods exist, in part, because people have the need of establish their own status (Anderson & Hildreth, 2015). Consumers have been developing a sense of curiosity and they are increasingly interested in gather information about products to evaluate whether they fit with their values; this explains the necessity to feel authentic experiences as well as show others sophistication and elegance using luxury goods (Wang, 2021).

Even if the world of luxury is in continuous evolution, the industry pillars as well as the customers' behavior have remained the same. This means that, although luxury nowadays is offering more accessible high-end products to many consumers, the importance of a wealth-based perspective is still a relevance point (Wang, 2022). Indeed, the luxury has itself a double balance: from one side luxury brands try to keep up with latest trends, including innovation and digitalization in the purchase process and customer journey. On the other side, they stick to ingredients such as brand heritage and authenticity, essential in luxury goods.

1.4 Personal-oriented vs social-oriented motivation for high-end quality cars

In the light of what has been said so far, two main driving forces when purchasing a luxury car can be determined: personal-oriented motivation and social-oriented motivation (Wang,2022). With regard to the first one, it is characterized by internal factors, such as the trivial intention of buying a luxury car in order to have more comfort, perfectly matched for a sophisticated and cutting-edge drive. In this case it could be said that the decision of purchase a luxury car lies in the hedonic experience associated with the product, according to individual-based standards (Potavanich,2015).

The second motivational push (social-oriented) concerns behaviors linked to the external world, enhancing the intention of impressing other individual by showing wealth, status and membership to a reference group (Tsai,2005). For this group of consumers, the prestige that comes from owning a car is important (it is perceived as a status symbol). It is configured, therefore, a type of consumer that is strongly pushed by showing off certain characteristics with the aim of arousing interest and reaching a specific place in the social context (De Angelis et al., 2020). This conception of luxury goods embraces dimensions such as ostentation (Mason, 2001; Vigneron & Johnson, 1999), exclusivity (Colella et al., 2019), social positioning (Amatulli & Guido, 2012), and rarity (Phau & Prendergast, 2000).

It is interesting to highlight the fact that individuals who buy a car for a more internal reason, such as passion, will still be attentive to the judgment of other people but in a lower manner and, tendentially, will tend to

orient their purchasing decisions based on their personal taste, aiming at maintaining consistency between the image of the products they buy and their inner "ego" (Raju, 2018).

Analyzing the consumer's behavior towards a luxury good such as a car, undoubtedly the emotional sphere assumes a central role. This is due to fact that all the competitive brands in the market are characterized by a strong brand heritage.

When it comes to take into analysis luxury branding, indeed corporate heritage has a crucial importance (Balmer & Burghausen, 2015). Heritage is a term inherent to the world of communication, used to describe the history behind a brand (Brand Heritage). In its entirety, brand heritage leads back to the concept of brand identity, which means considering the brand as a real identity, with its own history and its own past. It can therefore be said that brand heritage refers to a real process of sedimentation within the market, where the brand has been able to strategically exploit its history to create a strong relationship with consumers (Pecot, 2022). The previous explanation could be misleading because it goes without saying that each brand has its own history and its own evolution, but in reality, this is not enough. It is the perfect combination of intangible values, tradition and authenticity that is the winning key to being able to maintain a strong brand heritage, able to survive in the long term.

For instance, Porsche has a rich history of designing and building some of the world's most sought-after sports cars, such as the 911, Boxster, and Cayman. These vehicles are renowned for their sleek designs, powerful engines, and exceptional handling, making them popular among car enthusiasts and racing enthusiasts alike.

1.5 Automotive 4.0: opportunities, risks and trends

The Internet and digital are literally revolutionizing the foundations of the entire automotive industry (Llopis-Albert, 2021). It is no coincidence that, at major international auto shows, alongside the classic manufacturers in the industry are also the digital giants, which are increasingly expanding their space by facing the automotive industry. The future is advancing in automobiles, which are increasingly rich in instrumentation: you no longer buy a simple means of transportation, but also a computer, a phone, integrated on the car 'accessories. Vehicles are increasingly smart, connected and consequently safe. Now it is likely to use the monitor that acts as a navigator and the cameras that enable perfect parking by replacing the rearview mirrors. The choice to focus part of this analysis on industry 4.0 lies in the fact that this is primarily related to the world of manufacturing industry, and the automotive segment is one of the main actors. The well-known and prestigious consulting firm McKinsey (2015) defines Industry 4.0 as the digitalization of the manufacturing sector, where four main categories of disruptive technologies are in action: data and computational power, analytics and intelligence, augmented reality and lastly advanced robotics.

A more comprehensive and detailed definition has been provided by Nayyar and Kumar (2020), which describe Industry 4.0 as "A digital revolution being witnessed in the present generation whereby the aim is to

digitize the entire manufacturing process with minimal human or manual intervention. The aim is to encompass as many industries as feasible and adapt and enhance the existing technologies to better suit the needs of digital manufacturing”.

In other words, Industry 4.0 refers to the present movement towards shared information and progressive automation in the manufacturing and technology sectors, where automotive industry belongs to (Lin, 2018). We can therefore say that the term "Industry 4.0" is no longer just a term for improving production, as it refers also to the centrality of communication and continuous exchange of information: a never-ending flow of data that is based on a well-developed and integrated network, both within the industry and with the external environment. With the application of these hyper-specialized and innovative technologies in the automotive sector, the expression Automotive 4.0 has been originated. Considering the value chain of the luxury automotive industry, the element that needs to be empathized is the fact that the application of industry 4.0 is massive. As a matter of fact, not only industry 4.0 is pervasive across the manufacturing process, but also across all the other steps of the value chain, making it more efficient and responsive to the external changes. The customer experience is at the core of the key defining factors that drive an automaker's success, and digitalization has progressively affected it by, for example, shifting the car buying experience from a dealership-centered process to one that embraces several digital touchpoints and intermediate steps (Cognizant, 2021). It goes without saying that it is a revolution that originated a multitude of opportunities for refining the experience itself, making it smooth and seamless for buyers. In other words, combining for instance physical and digital technologies such as robotics and artificial intelligence during the customer journey might be a revelational application to make the customer experience engaging. Nevertheless, the industry 4.0 finds application in several stages of the value chain, from human resources to production and sales (Paschetto,2015), improving internal processes and communication with final clients (Deloitte, 2020). Making some references about the aforementioned considerations, a relevant element highlighted is that automotive sector is emerging now as a follower of technology and digital applications. Only the well-capitalized players are able to dominate the automotive sector, while the traditional automakers struggle to survive, and if fail to expeditiously alter their disposition towards digitalization, their demise shall be inevitable. As a consequence, the importance of huge investments in technology gains importance in this context (Deloitte, 2020). However, a new digital orientation is needed but is not sufficient to perform in the global automotive luxury industry. Digital technologies must be combined with an integrated organizational design at the core of the business, based on a long-term strategy, in order to get benefits for the internal organization and to offer an excellent customer experience. To conclude the reasoning, “Change is the law of life. And those who look only to the past or the present are certain to miss the future” (John F. Kennedy, 1963). The author Sonntag (2021), highlights four main prerequisites for the implementation of these disruptive technologies in the business processes, bringing to life a framework of industry 4.0.

Firstly, as previously explained, the importance of horizontal integration across all networks. This means enabling the flow of information and data driven services within all the network departments in order to have a better integration between business partners and suppliers in the whole supply chain. Secondly, the whole value chain process must include a digital integration of engineering to offer a higher customer-oriented design. Lastly, a networked production system as well as a vertical integration in order to have a consistent and integrated manufacturing environment where data flows from the R&D to the logistics and sales area.

As it was mentioned before, customer experience is a key point in the core of luxury industries. In a political perspective, the application of digital platforms in the automotive luxury industry makes the customer experience even more tailored and unique, involving the customer in various processes like configuration and improving the communication with him (Silva, 2018). From the economic side, even if a huge investment is required to implement sophisticated tools for internal digitalization, in the long-term strategy a lot of costs would be reduced. In addition, quality management in the entire value chain can be more efficient, thanks to improved data quality and information sharing. By introducing digital tools, luxury automotive companies are able to reduce complexity. Anomalies and defects originated by human action can be detected in real-time. Hence, the simplification of all the human-computer interactions together with less complexity in the process is a relevant point for the car industry, as it already has been facing several challenges in the supply chain (e.g., delays for the lack of production materials) (A. Celli website, 2023). In general, the benefits and opportunities of industry 4.0 in the automotive sector concerns different categories. Not only do they aim at improving productivity, efficiency and collaboration, but also, they increase safety and innovation for the consumer of the future.

Shifting from opportunities to challenges, the main problematic areas in terms of digital transformation are three: financial hurdles, organizational problems, and technology roadblocks (Mc Kinsey's, 2020).

Financial hurdles include all the investments and costs associated with implementing digital deployments in the organization's value chain. Companies are quite reluctant when it comes to make investments that don't get any benefits in the short-term perspective. In order to really get the sense of their investments, companies need quantifiable proof of the digital success. The attitude towards innovation in a company's environment is also an adding factor that causes a slew of issues in the process. In fact, a shortage of technological capabilities, together with an absence of leadership, results in low levels of buy-in- defined as "acceptance of and willingness to actively support and participate in something" (The Merriam Webster Dictionary, 2023). As a results, implementing some digital aspects throughout the entire value chain requires a lot of effort and challenges. Lastly, the technology roadblocks represent a powerful threat in the digital transformation. They include low support from partners in all the decision-making processes, such as the choice of the correct platform to use. So, it refers to the complications when a new territory has been discovered, and no one has the necessary amount of information and knowledge to better guide it.

Analyzing the disruptive revolution occurring in the automotive luxury industry is particularly useful to understand the emerging trends in terms of digitalization and how they are radically changing the definition of this specific sector in the next future. Thus, now that the most relevant issues driving the application of industry 4.0 in the automotive have been listed, an overview of the main trends and how they are managed by automotive players is needed. According to the German luxury automotive brand Mercedes-Benz (2023), the mobility of the future revolves around four cornerstones that can be summarized by the acronym C.A.S.E., Connectivity, Autonomous driving, Shared-mobility, Electrification.

From a report published by Deloitte (2021) on the future of mobility, the acronym is extended to C.A.S.E.S., adding “Servitization” as a future perspective as well, highlighting the consistency of the topic for the future of the market. These macro-trends impose a profound rethinking of the concept of "car" itself. There is a need to redesign not only the logic of purchase and use of the vehicles themselves by the end-user, but the very business models of the different players in the market.

There are several business and technological transformation trends active today, highlighting significant long-term changes. Although they are still in the early phases, their convergence is already having a relevant impact on automotive and the whole future of the transportation scene (European Commission, 2021).

In regard to the mentioned trends, the author has chosen to present *in-primis* a general scenario, and *in-secundis* analyze future strategies for the three different players in the automotive industry: OEM (original equipment manufacturer), dealer and supplier.

Firstly, two popular trends will be taken into account: electrification and connectivity. Indeed, they have a dominant position in the automotive landscape as they are strictly closed to issues such as sustainability and innovation. In 2022, electric vehicles represented only 1.5% of the total European car market, but by 2035 the share is expected to reach 130 million vehicles (Il Sole 24 Ore, 2022). Northern Europe is one of the largest markets in terms of electric cars; Norway has in fact committed to having all new zero-emission cars by 2025 and it is no coincidence that in Oslo one in five cars is battery electric¹. Surely a great boost for the spread of electrification has been given by the numerous incentives offered by the country, such as exemption from almost all taxes, reduced prices for tolls and for parking in public parking lots. The renowned manufacturers have long set the primary objective of conquering a distinctive trait within the nascent electric market, investing in R&D activities to improve performance compared to traditional engines, starting cross-sector strategic alliances for the control of key technologies. In a future perspective, the car must be conceived as an element in which the green aspect and the smart aspect co-exist, meaning that implementing sophisticated digital technologies emphasizes the benefits of environmental sustainability. Concretely, digital applications could be data sharing in order to reduce traffic congestion and minimize consumption.

¹The previous data has been taken from the source “Sfatiamo le fake news sull'auto elettrica atto secondo” Guide published by Jaguar Land Rover Italy in 2023.”

From this last consideration we connect to the second emerging theme talking about automotive industry in the future: connectivity. Connectivity is the adoption of technology 4.0 realized with tools such as Artificial Intelligence, satellite connection, and Internet-of-Things. Vehicles that are connected share a variety of data properties from several sensors, delivering comprehensive information on the vehicle and its surroundings. Understanding traffic patterns, driving behavior, and other relevant insights is made possible by automotive data from connected automobiles. Indeed Connectivity, and all its related elements, represents a powerful tool for other C.A.S.E.S. technologies. Technological progress applied to the sector achieves a twofold objective; on the one hand it optimizes vehicle performance, with advanced sensors and monitoring systems, and on the other hand, it enhances the customer experience, making the customer journey smoother.

Today the offer of mobility solutions connected to the shared mobility trend is increasingly wide, underlining the fact that the concept of the car itself is no longer merely associated with mobility (Fondazione per lo Sviluppo Sostenibile, 2021), but with something more extensive. In 2020, In Italy the volume of shared vehicles was estimated to be greater than 85,000 units, a value close to the double of the one in 2019 (Deloitte 2021). In addition, governments and public institutions have taken a standby encouraging the use of sharing vehicles in order to solve problems regarding air pollution, traffic congestion and occupation of volumes in public spaces.

In a world where competition is increasingly high and the offer from brands increases more and more, the value of the car as a durable consumer good can be re-interpreted; the term servitization refers to all those emerging B2C solutions that are able to offer the customer an ecosystem of ad-hoc services.

These include leasing, long-term rental or pay-per use services. They are all commercial techniques that allow the customer to access and try different models of the same brand, or even different brands of the same. In 2022, 62% of Italians were willed to pay a higher premium price than traditional leasing to be able to try different models of the same brand over time (Deloitte, 2022).

Like sharing mobility, the spread of this latest trend also emphasizes that the vehicle is moving towards a more flexible concept of use, which adapts according to specific habits and needs.

In analyzing the future dynamics within this sector, it is important to observe who are the main actors and specifically how the C.A.S.E.S. macro-trends will be reached by each of them.

The term Original Equipment Manufacturer (OEM) indicates a company that produces a good and sells it to other business entities, under the same name. In other words, OEMs are automotive manufacturers such as Stellantis NV, Mercedes-Benz Group Ag, and Ford Motor CO. To keep pace with the evolution of new second models, OEMs must continue to invest in R&D, design and product innovation projects to maintain market positioning and competitiveness. All this translates into the introduction of new business models or the adoption of new operating models and the development of new skills in the management of the customer base (e.g., enhancement of big-data and information from the customer journey; maintenance of the loyalty also in after-sales services; creation of front-end platforms that allow users to configure, customize and order the car

that best suits their needs). A close connection with the network of dealers will be necessary to integrate information systems and real-time data in a lower invasive manner, in order to stay up to date in customer service processes as much as possible. If on one hand is important to guarantee efficiency in the provision of the service by dealers, on the other hand it is equally relevant to maintain a correct evaluation of all processes in the supply-chain, adopting an agile and flexible model, capable of adapting to the most unexpected events. The trend on the part of consumers to the increasing use of digital channels will result in the spread of go-to-market strategies, defined as how an organization manage to enter in a market and how it builds its competitive advantage (Gartner Dictionary, 2023). In other words, the new business models will be characterized by "direct consumer" initiatives, shortening the value chain and the necessary intermediaries. It goes without saying that resources will have to acquire new skills in terms of CRM management, data integration and digital channels. The second main actor is the dealer: he will have to develop and evolve his role through new ways of selling and assisting customers; In this case the phenomenon of "servitization" is the most significant trend in economic terms for their business model. A high profit margin will be guaranteed by investing in resources training to manage the complexities in the assistance process and in the provision of accessories services. As previously reported, focusing only on selling through physical facilities will only lead to losing competitiveness in the market. For this reason, an omni-channel strategy with e-commerce services and digital touchpoints must be a prerogative to maintain brand loyalty and at the same time succeed in embraces new customers. The customer experience must be emphasized through the use of sensory elements, thanks to AI and VR, and trust in the dealer who will be able to customize the product and the experience itself at 360 degrees. The dealer must be able to return a customer journey as smooth and flexible as possible. Finally, within this dynamic and constantly changing sector we find the role of suppliers. In particular, suppliers play a very important role in the analysis of phenomena such as electrification and connectivity, cornerstones of automotive 4.0. The new vehicle models, which are distinguished between BEV (Battery-electric Vehicles) and PHEV (Plug-in Hybrid Electric Vehicles), aim to significantly reduce the number of components needed for the vehicle and at the same time increase the specialization of specific components such as sensors, electronic charging systems and batteries. The primary objective to keep in mind for suppliers will be to create added value through software components and digital features, with a view to changing their business model. There will therefore be several strategic choices to be implemented, such as maintaining the focus on the most profitable core activities, separating the business areas that require greater transformation. In other words, suppliers will have to devote a large part of their investments to the most emerging market areas that will also be the most profitable in the future, and in some cases go to restructure the business with the help of third parties. To keep up with technological evolution, adaptability and flexibility will be the key to being able to cope with the change in terms of product required by the market. Reshaping the product portfolio is one of the most significant challenges mentioned so far, especially because it requires complex managerial skills and

abundant investments in order to rebuild a business model, from resource training to the planning and design of innovative products.

CHAPTER II: LITERATURE REVIEW AND RESEARCH QUESTION

Integrating digital and technical advancements in internal operations is widely considered an effective approach for automotive firms to achieve efficiency, effectiveness, and competitiveness (Paolucci et al., 2021). By conducting a comprehensive literature review, this study intends to analyze existing research, theories, and practical applications related to digitalization in the automotive sector.

A comprehensive literature review serves to map and evaluate prior research in order to establish the research area's context and support the study's objectives and research questions (Tranfield et al., 2003). Following the reasoning, it is commonly employed as a methodological tool to address various research questions effectively. In this research study, literature review serves the purpose of offering an overview of how automotive industry is responding to digital transformation. In this specific case it focuses on understanding deeply how the luxury sector of this branch is increasingly applying digitalization. So theoretically, literature review contributes to the evaluation of the current knowledge state regarding the chosen topic (Snyder, 2019).

The primary objective of this literature review is to offer a more comprehensive and elucidating view of the phenomenon of digitalization within the automotive industry. It aims to identify the most influential fields of application and explore the process by which digitalization occurs. Furthermore, this chapter endeavors to underscore the existing gap in academic literature, which tends to overlook the presence of a luxury segment within the automotive industry despite its significance.

Firstly, this literature survey examines the many applications of digital technology in the internal operations of automobile firms, In the area of the supply chain, which encompasses the full range of operations within most automotive firms, digital technologies serve as a fundamental platform for conducting business (Balakrishnan, 2021). Pfohl and others (2015) found fundamental contributions in the content of supply chain, and lately other academic researchers (Kern & Wolff, 2019) selected the particularly relevant ones for the digital transformation of the supply chain with a high practical relevance to the automotive: Internet of Things, Big Data and smart technologies.

There are studies such as those by Hu & Basiglio (2023) and Payne & Frow (2006) that focused on the fact that automotive companies can leverage big data and analytics. They defined Customer Relationship Management (CRM) as a strategic tool recognized to enhance shareholder value and capable of offering various advantages, including increased customer engagement, innovation, and customer loyalty. Other academic studies (Vanderbilt, 2012; Hanelt et al. 2015) shifted the analysis of automotive sector to digital platforms, giving rise to a new concept of the car. Already in 2004 (Lusch) the researchers started analyzing the mobility shifting from a product-centric approach, where the focus was primarily on the car itself, to a service-oriented model where the car serves as an enabler for delivering various services. The main findings of this paper supported the idea that already ten years 'ago the car is evolving into a platform on which add-

on services run. For the aforementioned considerations, Customer relationship management, Supply chain management and digital platforms are among the three key topics of the examination.

2.1 The economic value of customer information in corporate databases: the customer relationship management

In today's environment of a knowledge-based economy, one of the biggest challenges for companies is to quantify concretely the relevance and the economic value of the information generated and managed from the customer base (Lamela-Orcasitas & Garcia-Madariaga, 2023). Customer relationship management (CRM) refers to the strategic approach aimed at improving the value of a business through the development of appropriate interactions with key customers and building a long-lasting customer's loyalty (Tigari, 2018). CRM emerged in the 1970s (Buttle, 2004) as a novel instrument for effectively managing and optimizing sales-force automation within organizations. Since then, it has evolved into one of the most widely adopted tools for enterprise information management, encompassing not only sales and marketing functions, but also serving as a means for enhancing customer interactions (Gil-Gomez, et al., 2020).

CRM has become increasingly important in today's digital age as businesses seek to engage with customers across various channels and touchpoints (Saini, Sharma & Loyal, 2020). These insights can then be used to develop personalized marketing campaigns and provide tailored goods and services, enhancing customer experience and fostering loyalty (Bleier et al., 2018). Customer relationship management also uses digital technology to enhance customer satisfaction and encourage loyalty (Gerschewski & Klingholz, 2017).

Following the logic, it is fundamental to analyze the considerations offered by the literature concerning the psychological and behavioral mechanisms that emerge when digitalization is employed as a means to enhance brand loyalty and customer experience (Donio et al., 2006; Saritas & Penez, 2017). These resources provide valuable insights into the psychological and behavioral processes that individuals undergo when digital interventions are introduced, ultimately impacting their level of brand loyalty and overall customer experience. A significant starting point in the literature has been presented by Rodrigues and others (2023) who began their research by positing that establishing a strong bond between consumers and brands is a crucial determinant of success, and car brands are not an exception. Furthermore, they claimed that a strong association between brand love and behavioral intentions indicates a higher propensity for consumers to engage in digital channel interactions, such as participating in online questionnaires and post-sales research. Therefore, from this standpoint, integrating digitalization into areas like customer relationship management presents an opportunity to foster brand loyalty and engage with customers who are more inclined to develop a robust relationship with the brand (Zhang et al., 2016).

While most previous studies have predominantly focused on investigating the effects of digital methodologies such as artificial intelligence (AI), social media, and virtual reality (VR) on consumers' buying patterns (Hamzah et al., 2021; McLean et al., 2021; Pizzi et al., 2020), the literature research conducted by Li and

others (2023) aims to examine the incorporation of diverse digital technologies in brand establishment and brand performance analysis. Indeed, the authors propose that the utilization of digital technology can enable consumer-brand interaction (Wang, 2021) and potentially emerge as a significant factor influencing brand performance, conceived as brand loyalty, intention to purchase, and brand recommendation (Li et al., 2023). Automotive industry is a sector in which the customer information aspect has been especially valued and whose development and customer approach characteristics require particular attention in contract management (Scherpen et al., 2018). Indeed, in a sector such as the automotive one, the achievement of customer satisfaction and loyalty cannot be separated from the quality of service that is provided (Thaichon & Quach, 2015). The act of purchasing an automobile is associated with necessity, reliability, self-expression, and a significant financial commitment. Car buyers are likely to possess a substantial amount of information, necessitating dealers to effectively incorporate this information through personalized interactions. This enables the nurturing of key aspects associated with the purchase process specific to the targeted individual, who possesses distinct personal and social attributes. This provides that for every seller, regardless of the context and the product, is pivotal to have a deep knowledge of the type of potential buyer in order to set an array of communication means able to foster, at the same time, information provision and collection (Hermann et al., 2007). The ideal process is to leverage available information to gather more, and use data collection, analysis and management systems to get the most out of your customer interaction (Giacosa et al., 2022). For instance, automobile businesses increasingly utilize social media platforms to engage with consumers, communicate the characteristics of their goods and services, and solicit feedback (Raji, et al., 2019).

Furthermore, Giacosa (2022) highlighted the importance of the interconnection between agility and digital transformation; indeed, embracing a digital mindset, implementing a flexible and agile company structure, and developing comprehensive digital skills is the key to effectively drive digital transformation. More authors such as Zhou (2018) and Huang (2021) supported and emphasised a crucial perspective concerning customer data: in times of turbulence, the survival and prosperity of organizations can be facilitated through customer agility, which relies on real-time monitoring of customer data. In contrast to the initial perception of the internet as a platform primarily for seeking bargains, it is now increasingly recognized as a space that enables improved service provision and the cultivation of stronger consumer relationships (Thaichon et al., 2012; Batat 2022). It has become evident that companies need to aim for a comprehensive understanding of their customers (Cader & Al Tenaiji, 2013), with the support of the internet as a valuable instrument for implementing relationship marketing strategies (Bowden, 2021).

Various studies have been undertaken to explore the linkages between customer management and digital technologies, although they have yielded different definitions and findings (Tallon et al., 2019). Roberts and Grover (2012) examined the significance of data management and highlighted how a proficient IT infrastructure capable of facilitating information sharing across the organization would enable more

streamlined approaches to meeting customers' requirements. Furthermore, Chatfield and Reddick (2018) investigated the relationship between big data analytics, customer agility, and emphasized the necessity of a robust IT infrastructure for real-time monitoring of customer data.

When a company is capable of exploit the flow of information to really understand which are the successful strategies and which are the customers 'needs, in fact, the management of customer data creates economic value for the business (Harrigan et al., 2020). CRM in the automotive sector employs various strategies and technologies to effectively manage interactions with existing and potential customers throughout their lifecycles (Malik,2015). Automotive businesses implementing CRM systems can access vital customer data to gain an in-depth knowledge of customer preferences, behaviours and unique requirements (Anshari et al., 2019). This type of businesses uses data-driven approaches to tailor their marketing, sales, and aftersales efforts resulting in enhanced customer satisfaction and loyalty. Surely, CRM tools help streamline lead management, enhance sales process efficiency, and enable proactive customer support services, making CRM an indispensable component in automotive industries (Ammozad et al., 2022).

2.1.1 Customer data-based innovation and privacy concerns

As it was observed previously, the literature highlighted that the fundamental procedures in customer relationship management entail the collection of customer information and the subsequent application of data mining techniques for analysis purposes (Xu & Qiu, 2008).

Data mining involves the exploration of extensive databases to uncover concealed relationships and overarching patterns that may be present within the vast volume of data (Saraee et al., 1998). By employing data mining techniques, businesses can effectively analyze customer data and extract valuable insights to attain a competitive edge over their counterparts (Ranjan & Bhatnagar, 2008).

Nevertheless, conflicting perspectives concerning the privacy and data utilization emerge as significant challenges (Kumar et al., 2018). In the present day, the rapid advancements in technology have resulted in a reduction in costs for companies when it comes to the collection and utilization of consumer data (Goldfarb & Tucker, 2019). Consequently, this has given rise to the emergence of new information flows that may pose a threat to consumer privacy, as data is being applied in novel manners and within different contexts (Acquisti, Taylor, & Wagman, 2016; Nissenbaum, 2018).

The phenomenon observed in the existing literature pertains to the utilization of data in new contexts, which has the potential to pose a threat to established norms and give rise to privacy concerns (Acquisti & Gross, 2009; Lenard & Rubin, 2013). A substantial number of businesses primarily concentrate on collecting novel types of data and subsequently employing it in ways that were unforeseen by consumers (Bleier et al., 2020). From another perspective, Quach and other authors (2022) discussed and directed their research on Consumer privacy protection behavior. Their conceptualization suggests that as consumers become more cognizant of

the diverse privacy concerns arising from their interactions with companies, their level of concern or apprehension may trigger protective actions (Walker, 2016). The intensity of fear or worry experienced by individuals relies on the nature of the regulations and resources accessible within their relationships with firms. Evaluations of relationship structures typically encompass an assessment of the severity of privacy risks, their perceived likelihood, as well as the perceived vulnerability or capability to effectively manage these risks (Lwin et al., 2007). Quach (2022) outlined two strategies: reactive and proactive information strategies. In the case of the reactive strategy, consumers can address immediate privacy threats by rectifying their digital footprint in response to privacy concerns. Additionally, consumers may opt to withhold certain pieces of information intentionally when initially requested, thereby avoiding disclosure (Martin & Murphy, 2017). On the other hand, regarding the proactive strategy, Lwin (2007) defined it as mechanisms that involve exercising restraint as a protective measure, shaping consumers' ongoing practices of information withholding.

Shifting the focus from consumers to firms, business companies have the choice to either adhere to privacy regulations (reactive response) or surpass them by actively engaging in privacy innovation (proactive response), which has the potential to shape new frameworks (Luo, 2006). The primary objective of the first one is to ensure compliance with legal boundaries and meet general privacy expectations. Instead, proactive response from firms involves implementing accountable business practices that necessitate involving partners in data governance to ensure comprehensive security (Merrick & Ryan, 2019). By adopting a proactive approach, firms can address the concerns of even highly skeptical consumers and cultivate trust by creating a secure ecosystem, providing an effective means to address both proactive consumer responses and regulatory requirements (Martin et al., 2020).

The work conducted by Den Hartog and Zannone (2018) emphasized that despite the advantages that arise from the adoption of digital applications in the automotive sector for both industry and consumers, the integration of automotive applications with enabling technological innovations poses considerable challenges in terms of security and privacy. The study of vehicle security has gained significant attention due to the growing number of vehicle assets and the enhanced ease of interacting with modern vehicles. This heightened interest is a direct result of the demonstrated occurrence of various attacks targeting vehicle security (Mazloom et al., 2016; Palanca et al., 2017; Koscher et al., 2010). A case in point is the demonstration conducted by Miller and Valasek (2015), wherein they showcased an attack capable of remotely tracking a vehicle and executing multiple actions, such as modifying the radio volume, disabling the vehicle's engine, and impairing the functionality of the brakes.

Collectively, prior studies have extensively addressed various security and privacy aspects, often delving into considerable detail. However, the majority of previous surveys have tended to concentrate on specific aspects individually, rather than providing a comprehensive overview.

2.2 Digitalization and Supply Chain Management

The automotive industry's supply chain management has undergone a digital revolution, achieving new heights of efficiency, transparency, and cost-effectiveness (Klaus & Gorgas, 2019). Digital technology has made it possible to integrate supply chain partners and improve decision-making, even if for the automobile sector it is complex as there are many suppliers, intermediaries, and stakeholders (Reddy et al., 2021).

(Koot et al., 2021). The concept of disruptive technology has garnered considerable attention in the realms of academic research as well as business practices, emerging as a prominent and widely discussed subject matter (Christensen 1997; Obal, 2017).

Blockchain is a remarkable technology that is altering supply chain management (Saberli et al., 2019). The use of blockchain in supply chain management has made it possible to track goods and transactions securely and transparently (Gerschewski & Klingholz, 2017). Patel (2017) asserted that blockchain technology holds the potential to revolutionize numerous financial and non-financial sectors. Nevertheless, its widespread adoption is likely to encounter challenges in the areas of security, legal frameworks, regulations, and technological advancements (Wang et al., 2019). Furthermore, Korpela (2017) emphasized the significance of blockchain as a means to enhance the integration of product and process data. Lastly, Nakasumi (2017) highlighted the importance of blockchain as a solution to information asymmetry for final consumers. For instance, the blockchain can be deployed as a means of enabling a record of complete provenance details for each component part of a car.

Big Data is another piece of technology that has revolutionized supply chain management (Aryal et al., 2020). The utilization of Big Data, including data sourced from social media and networking applications, is prevalent in the realms of business and marketing. However, research examining its role, usage, and potential within supply chain management appears to be comparatively limited or less developed (Casemore 2012; O'Leary 2011). Hazen and other authors (2014) have analyzed the impact of Big data on data Quality, highlighting the fact that it is crucial to monitor and control the quality of data in supply chain processes, otherwise the system risks to be compromised. Additionally, it has been argued that competition is no longer confined to individual firms but extends to encompass entire supply chains (Llopis-Albert et al., 2021; Craighead et al., 2009).

So, companies can precisely estimate demand and manage inventory levels by using cutting-edge algorithms and machine learning, which minimizes stockouts and lowers the expenses associated with excess inventory (Rejeb et al., 2022).

Generally, there are several advantages to integrating digital technology into supply chain management, including lower costs, more efficiency, and enhanced transparency (Dutta et al., 2020). For instance, suppliers can now follow the flow of parts and components from the supplier to the manufacturer thanks to radio frequency identification (RFID) tags (Klaus & Gorgas, 2019).

Manufacturers may improve their manufacturing processes' precision, efficiency, and consistency by using robots and automation (Saini, Sharma & Loyal, 2020), technologies that allow producers to create more complex and individualized items (Rafiquea et al., 2022).

Until now, the literature has provided intriguing insights into the subject of robotics. Notably, Wewerka and Reichert (2023) provided a comprehensive overview of Robotic Process Automation (RPA), a methodology aimed at automating business processes or their elements through the utilization of software robots, commonly referred to as bots, which simulate human interactions. Scientifically, RPA has been extensively explored in various literature reviews (Ivancic et al., 2019; Hofmann et al., 2020), case studies, and research that promote the implementation of RPA (Chacon-Montero et al., 2019). However, there is a noticeable scarcity of research concerning the introduction of RPA in the automotive industry.

Trust is an essential requirement for user acceptance in human-technology interaction (Emaminejad & Arkhavian, 2022). With the increasing prominence of artificial intelligence (AI) in our lives and the emergence of autonomous and intelligent agents in industrial settings, it is crucial to establish trust between human counterparts and these agents (Kessler et al., 2017). Research consistently demonstrates that an explainable and transparent decision-making process can contribute to users developing an appropriate level of trust in intelligent agents (Wang et al., 2016). However, while transparency is a significant factor, it is not the sole element influencing trust in AI and robotics (Winfield et al., 2018). Studies have indicated that new technologies are more trusted when they function reliably and safely, akin to our expectations of human behavior (Deley & Dubois, 2020). Contextualized research, with a specific focus on the cultural environment in which the technology is adopted, is widely recognized as crucial for understanding trust in AI and AI-powered robotics (Yahya et al., 2019). Reliability and safety have emerged as common dimensions of trust concerning AI applications (Emaminejad & Arkhavian, 2022), representing interconnected paradigms in the context of trust between human users and robot agents. On one hand, safe interaction with robots enhances their reliability and, in turn, their trustworthiness (Murashov et al., 2016). Conversely, heightened reliability can result in an excessive reliance and potential complacency when robots exhibit unsafe behavior (Emaminejad & Arkhavian, 2022). This tradeoff emphasizes the importance of trust calibration within a human-robot team, with the objective of attaining an appropriate level of trust that takes into account the capabilities of both the human and the robot (Lee & See, 2004). The trust calibration process enables a human to accurately perceive and evaluate the associated risks when placing trust in either a person or a machine, therefore, to acquire knowledge pertaining to the capabilities, reliability, and failure modes of the agent, with the aim of preventing both overtrust and under trust (Borenstein et al., 2018).

2.3 The development of electronic document management system

Within companies, documents hold immense value as they serve as the fundamental pillars for communication, collaboration, and record-keeping purposes. (Dornberger et al., 2018; O’Leary, 2023). While traditional paper documents were once the norm for document management purposes, digitalization has completely revolutionized document administration, providing immense advantages and efficiencies over its previous form (Kronblad, 2020). Corporate documents serve a crucial function in storing valuable information and preserving the organizational memory (Macias-Jiménez et al., 2020). In contemporary times, there is a significant focus on formulating strategies to ensure the longevity and effective management of these documents throughout their lifecycle. The advent of information and communication technology (ICT) and the exponential growth in document generation have sparked a revolution in the methods and techniques employed for document management (Abidin & Husin, 2018). Indeed, there is a heightened focus on the improvement of document management procedures. Consequently, Macias- Jiménez (2020) pointed out that one of the strategies embraced by companies is the design and implementation of electronic document management systems (EDMS). Such systems significantly contribute to alleviating challenges associated with the management of paper documents, including difficulties pertaining to information accessibility (Jervis & Masoodian, 2014), deterioration resulting from frequent handling or unsuitable storage conditions, and even the potential loss of critical information (Sprague, 1995).

However, it is important to highlight that digital transformation also engenders considerable uncertainty for Chief Information Officers (CIOs) and a thorough evaluation is imperative to assess the business's capabilities and to determine the appropriate requirements for the successful deployment of electronic document management system (Macias-Jiménez et al., 2020). Simultaneously, any transformative endeavor undertaken by a CIO will not solely impact the IT department, but rather, it will reverberate throughout the entire organization, as well as its clientele and collaborative associations (Bongiorno, 2018).

Many studies discuss the challenges associated with electronic document system, examining various aspects and offering different perspectives. Notably, Chudaeva (2019), Lerch (2015) and Verhoef (2021) explored the impact of digitalization on enterprise activities. On the other hand, some scholars focus on major digital transformation trends across different scenarios (Kiava-Oja et al., 2017), models of marketing diversification (Shpak et al., 2016), the relevance of electronic communication technologies (Chaffey & Ellis-Chadwick, 2016) and the influence of marketing digitalization on consumers (Patil, 2018).

The simple transformation of documents from paper to a digital or electronic format implies several benefits: Digital documents can easily be shared between departments or teams for real-time collaboration, with real updates on cloud document management systems providing employees access to information anywhere at any time, further increasing operational agility while streamlining remote work processes (Chaffey & Ellis-Chadwick, 2016). Indeed, the choice of adapting the business and develop an innovative approach by

implementing digital documents have reduced paper consumption considerably, helping automotive companies reduce storage costs, risks associated with document loss or damage and storage requirements while at the same time increasing speed, accuracy and reducing administrative burdens (Di Vaio et al., 2021). However, it is necessary to recognize the challenges. The literature presents insightful analyses of the primary obstacles to the digitalization of services, particularly in the context of transitioning from paper-based documents. One key barrier identified is the lack of qualified personnel capable of developing and delivering such services (Kagermann, 2014). The process of digitalization has significantly increased the complexity, abstraction, and demand for problem-solving skills among employees (Lerch & Gotsch, 2015). In their work, Lerch and Gotsch also emphasized that employees directly involved in service provision require a technical skill set encompassing knowledge of engineering, mechatronics, and IT.

According to Abidin (2018), physical documents retain their relevance, highlighting the concern that electronic files are more susceptible to malware attacks, thereby compromising security compared to physical documents. Therefore, the management system should prioritize security measures, cost savings, and controlled accessibility (Ramli & Dollah, 2010; Luna-Reyes & Gil-Garcia, 2014).

Hoffman (2014) proposed another critical aspect in delivering digital services, which is the need for ubiquitous and real-time communication networks with high data transfer rates and the capacity to handle large volumes of data. The existence of a stable and reliable technical infrastructure is essential for the economic provision of digital services (Verhoef et al., 2021). Only broadband networks have the capability and stability necessary to enable both service providers and customers to fully access the benefits offered by digital solutions (Bauer et al., 2014; Westkämper et al., 2013). Consequently, digitized services may encounter significant challenges in areas where such infrastructure is unavailable or inadequate.

2.4 Digital platforms

The automotive sector is currently undergoing a profound period of transformation. Presently, it is increasingly common for consumers to engage with automotive brands online, surpassing the traditional practice of visiting physical brick-and-mortar stores (Savastano et al., 2019). Digital technologies have fundamentally reshaped the landscape of communication, bringing distinctive capabilities such as interactivity, measurability, customer engagement, customization, accessibility, and efficient management of extensive information sources (Dahiya & Gayatri, 2018). Marketers are increasingly turning to digital marketing communication as it enables them to provide personalized services and content in real-time to individual consumers (Madan, 2021). The widespread recognition of the digital medium's significant influence on consumer decision making is evident across various product categories on a global scale (Bowden et al., 2021). Empirical evidence supports the notion that digital channels are effectively enabling customers to engage in purchasing decisions by providing means for searching, evaluating, recommending, influencing others, and providing feedback on

products and services (Pires et al., 2022). The customer experience in the purchase of a prestigious and luxury car undoubtedly remains one of the aspects significantly impacted by digitalization (Winkelhake, 2022). Presently, the automotive industry operates through multiple sales levels, wherein manufacturers supply vehicles to importers, who subsequently distribute them to affiliated or independent dealers who interact with the end-customer. However, this multi-stage structure is expected to undergo a complete overhaul. As Winkelhake (2022) reported, in the future, a significant portion of vehicle sales and mobility services will be conducted through online platforms, which will likely offer a diverse range of brands from various manufacturers. Simonot-Lion and Trinquet (2008) presented a comprehensive examination of applications and platforms utilized in automotive control systems and telematics. Coppola and Morisio (2016) conducted a review of the services offered by connected vehicles, the communication technologies that facilitate these services, and the prevailing application platforms utilized for infotainment purposes.

In such a scenario, it is evident that every actor involved in the sales activity must reinvent themselves, finding new ways to digitally interact with the customer and re-build the future value-added system. To better understand and overcome the challenges presented by digitalization, a new approach has been risen: customer experience management (Scherpen et al., 2018).

Schmitt (1999) emerged as one of the pioneering academics to underscore the significance of customer experience, while Pine and Gilmore (1998) specifically delve into the importance of experiences in contemporary society and the potential for businesses to capitalize on establishing robust and enduring customer experiences.

Verhoef and others (2015) presented significant references regarding the subject of customer experience, emphasizing that the growing attention towards it is a direct result of customers engaging with businesses through a multitude of touch points and diverse channels.

Furthermore, a deeper examination (Lemon et al., 2016) revealed that firms possessed considerably less control over the overall customer experience and journey, which subsequently gave rise to behaviors like showrooming.

Customer experience is viewed as a concept that serves as a measure of an organization's performance in the present era (Ramasundaram, 2023). In the context of organizational performance being defined as the capacity to obtain a competitive advantage, customer experience plays a pivotal role in generating meaningful outcomes in terms of customer satisfaction, which is fundamental for attaining a competitive edge (McColl-Kennedy et al., 2015; Mosavi, Sangari, & Keramati, 2018).

The ability to create a captivating experience stands as a distinguishing characteristic for an organization, and the ability to deliver an exceptional experience holds paramount importance in developing customer loyalty (Ramasundaram et al., 2023). The phenomenon of customer experience management aims at adjusting all the point of contact of the brand with the client, the so-called “touchpoints”, satisfying the customer needs and

achieving long-term customer loyalty for the company (Batat, 2022). It goes without saying that digitalization re-shaped the way to interact with clients and forced automotive industries to offer a seamless and smooth customer experience to their final consumers (Bacher & Manowicz, 2020). Aligned with the objective of cultivating long-term customer loyalty, these touchpoints can be leveraged to establish a value chain that contributes to sales success.

The integration of various touchpoints within the retail industry necessitates the adoption of diverse technologies, digital devices, and platforms. Numerous scholars contend that the incorporation of a multichannel approach, aimed at enhancing the customer's experience, is central to the marketing strategies of many companies (Lee & Kim, 2010; Hossain et al., 2020; Akter et al., 2021) regardless of whether these companies compete in the retail and service sectors or other industries. From online vehicle configuration and virtual test drives to seamless integration with mobile devices, customers can engage with automotive brands at various touchpoints (Krishnadas, 2021).

Informed customers are more likely to make a purchase, and those who receive effective guidance throughout and especially after the purchase are inclined to re-buy the product and be loyal during the time to the brand (East et al., 2021). Therefore, if a company can shape its touchpoints in a customer-centric manner and fulfill the target audience's requirements, significant competitive advantages can be attained (Sherpen et al., 2018). Especially in the digital era, the attention to each specific touchpoint is essential, as for a company to establish itself solely on product quality, price and service excellence is no longer enough (Batat, 2019). Previous studies have established definitions and conceptualizations of digital platforms from various perspectives. For instance, a digital platform can be defined as “a building block that provides an essential function to a technological system and serves as a foundation upon which complementary products, technologies, or services can be developed” (Spagnoletti et al., 2015). Further research have provided conceptualizations of digital platforms as “two-sided network [...] that facilitate interactions between distinct but interdependent groups of users, such as buyers and suppliers” (Beverungen et al., 2021). Digital platforms in the automotive industry have brought together various stakeholders, including manufacturers, suppliers, dealers, and customers, onto a single online ecosystem. They provide a centralized hub where participants can connect, collaborate, and transact seamlessly (Aalbers & Whelan, 2021).

Overall, online media and emerging technologies such as augmented reality, virtual reality, live chats, and video chats will play an increasingly prominent role in customer interactions (Bacher, 2020). In addition, the aforementioned author (2020) indicated that in addition to manufacturers' websites and online sales platforms, digital channels such as social media, comparison portals, and independent new car platforms will also play a significant role.

2.5 The distinction between luxury and premium segment

To date, the literature review has primarily focused on aspects pertaining to the automotive sector as a whole. It has encompassed studies that substantiate the most pertinent mechanisms within the automotive industry, wherein digitalization exerts a substantial influence. However, it is noteworthy that all the referenced studies pertain solely to the general automotive sector, without particular attention given to the differentiation between the luxury and non-luxury sectors. It is imperative to emphasize that the automotive industry is indeed composed of distinct subsegments, each possessing unique characteristics (Stylidis et al., 2016).

Prior to delving into the elucidation of the research questions and establishing a clear research goal, it is imperative to explore a distinction prevalent in the automotive industry between the premium and luxury segments. Throughout the course of this study, a notable emphasis has emerged on differentiating between these two segments.

The term "premium" has predominantly been associated with pricing (Yeoman & McMahon-Beattle, 2016). Dall'Olmo Riley, Pina & Bravo (2015) defined premiumness as a mechanism to encourage customers to pay a higher price for a slightly superior quality product. This concept highlighted the influence of branding on consumer behavior and attitudes. In this perspective, price is an indicator of quality.

The market segment for "premium" automobiles has traditionally excelled in manufacturing quality, thereby engendering product differentiation primarily predicated on customers' perceptions of quality (Schmitt & Quattelbaum, 2010). Stated differently, within the premium automobile segment, manufacturing quality is not the foremost determinant of customer satisfaction but rather a prerequisite for entry into this segment (Robinson, 2000).

Conversely, the luxury automobile market segment has historically concentrated on an emotive and personalized approach to design (Bastien & Kapferer, 2013). Throughout the design process, substantial emphasis has been placed on design attributes that are intimately linked to symbolic values, such as aesthetics and brand image (Wiedmann et al., 2013). Comparatively less emphasis has been accorded to objectively quantifiable manufacturing quality design attributes, such as gap and flush measurements of vehicle body split lines, or other perceptual design attributes like squeak and rattle (Stylidis et al., 2014).

In academic research published in 2007 (Law & Evans) the authors aimed to delve into the articulation and explanation of the concepts of luxury and premium within the automotive industry. They underscored that luxury and premium are multifaceted concepts that can be applied at various levels, including the product, industry, market, or global level. However, in the automotive environment, luxury is primarily associated with the emotions evoked in the consumer by the car, whereas premiumness relates more to product quality, marketing strategies, and how it shapes an individual's perception by others. Luxury is characterized as a more personal experience, while premiumness is more focused on the product itself.

A review of the literature (Ko, Costello & Taylor, 2019) has confirmed that customers perceive luxury and premiumness as distinct concepts, despite the absence of consistent and unequivocal definitions for these terms. Nonetheless, these concepts evoke dissimilar connotations within the cognition of consumers.

2.6 Goal of the study

In the preceding paragraphs, it has been feasible to observe and document the substantial impact and disruptive nature of digital transformation in shaping diverse realms of the automotive sector. This phenomenon represents one of the most noteworthy occurrences in the industry's history over the past 140 years (Lopis-Albert, Rubio & Valero, 2023).

However, it is imperative to comprehend the specific influence of digitalization on the luxury automotive sector, as luxury companies frequently distinguish themselves through customer experience, technological excellence, and the exclusivity of their products (Holmqvist et al., 2020). Although luxury and technology may appear to be distant realms, their convergence presents a tremendous opportunity (Sestino & Amatulli, 2023), and new technologies could be a fundamental driver of growth and a pathway to novelty, creating new meanings and desires around luxury consumption (Seo & Buchanan-Oliver, 2019). While craftsmanship and artisanship have traditionally been strongly associated with luxury, the automotive industry further enhances the connection between high-tech and luxury. This distinct characteristic sets the luxury car segment apart from other product segments within the realm of luxury (Kapferer and Bastien, 2016).

The response of companies and large firms in the automotive sector holds significant importance as it serves as a reflection of the ubiquitous impact brought forth by digital technologies within an organization.

In particular, the present study has undertaken the endeavor to orient its research towards the luxury segment of the automotive industry, a domain that still remains relatively understudied in the existing literature. Notably, previous research published so far has generally overlooked the division in the application of digital technologies between luxury and non-luxury brands in the automotive sector, thus highlighting the literature's existing gap: the investigation of digitalization specifically tailored to the luxury automotive sector. The goal of this research work is to examine the integration of digitalization and technology in the business processes of an automotive luxury company and evaluate its impact on market performance. The peculiarity of the research is the fact that it aims to explore how the adoption of digital tools and technologies influences various aspects of the company's business operations.

In particular, the study focuses the attention within three distinct domains of an automotive luxury company: marketing, network management, and customer service. The choice behind the three domains previously mentioned is because they hold significant importance within the context of an automotive luxury company. By exploring the role of digitalization in marketing, this study aims to uncover strategies and approaches that

can enhance brand visibility, customer acquisition, and overall marketing performance. Moreover, Network management refers to the efficient coordination and integration of various stakeholders within a company's network, including dealers and partners. Indeed, digitalization has greatly reshaped the way to interact with all the network, which is extremely important for an automotive company. Finally, providing exceptional customer service is paramount in the automotive luxury industry, as it directly impacts customer satisfaction, loyalty, and advocacy. By examining the specific applications and impacts of digital technologies within these areas, the study aims to provide a comprehensive understanding of how digitalization can enhance business processes and outcomes in the context of the automotive luxury industry. Through a qualitative analysis this research seeks to identify the key drivers, challenges, and benefits associated with the adoption of digitalization in marketing, network management, and customer service. The findings of this study will integrate academic knowledge existent but will also offer practical insights and enriched the automotive luxury segment literature, showing how to interact with technologies to gain effectively a competitive edge and deliver exceptional customer experiences.

2.7 Research question

Despite the growing importance of digitalization and technology integration in the automotive industry, there remains a notable research gap regarding their specific impact on the business processes of automotive luxury companies and their market performance. In particular, the literature reflected the implementation of digitalization in the car itself, exploring new innovative technologies that have been made to directly enhancing customer experience such as autonomy driving and connected cars (Antonialli et al., 2022; Kern & Wolff, 2019; Khayyam et al., 2020). Instead, the following research focuses on examining the phenomenon of digitization applied to a more specific field, namely the luxury automotive industry. While the existing literature reports numerous studies on the use of digitization in the luxury fashion industry (Cabigiosu, 2020; Karadagan, 2020), the objective of this research is to delve deeper into the implementation of digital transformation in the luxury automotive sector. The research aims to explore how a luxury automotive brand, already recognized for its prestigious status, has successfully incorporated digitalization into its internal operations.

Specifically, the investigation seeks to understand the strategies, initiatives, and technologies employed by the brand to leverage digital transformation related to Marketing, Network Management and Customer Service. The scientific literature provides numerous studies on the evolution of hyper-technological trends in the automotive industry, such as the advancement of electric vehicles and autonomous driving. These topics have received considerable attention as they represent significant innovations that are transforming the automotive industry. However, in this specific research the goal is to develop a comprehensive understanding of how

technology can be effectively leveraged to create a competitive advantage and meet customer expectations in the luxury automotive industry, considering the three areas previously mentioned.

The following research questions are proposed:

1. How has a luxury brand in the automotive sector introduced and integrated digitalization into its internal business processes, thereby improving its market performance?
2. How has the integration of digitalization evolved and established itself as a facilitating tool in attaining specific objectives across diverse sectors of the industry, such as customer service, network management, and marketing?

In order to analyze and address the aforementioned research questions, this study will draw specific conclusions using Jaguar Land Rover as a case study. The selection of this particular company is motivated by the research objective of understanding the mechanisms within the luxury segment of the automotive industry and its relationship with digitalization. Consequently, Jaguar Land Rover stands as a unique entity in the global automotive industry, characterized by an unparalleled cognitive capability to anticipate the future luxury needs of its customers and a strong emotional current associated with its brand (Jaguar Land Rover website, 2023).

2.8 Case Study: Jaguar Land Rover

Before providing a general overview of Jaguar Land Rover and explaining the reasons for choosing it as a company case study, it is essential to encapsulate all the considerations made so far within the definition of a luxury brand. Indeed, a luxury brand is viewed by consumers as a set of different mental constructs that incorporate associations concerning high price levels, superior quality, aesthetic attractiveness, exceptional characteristics, and a significant presence of non-functional attributes that make the product emotionally unique (Heine, 2012). Taking into consideration the previous definition, Jaguar Land Rover is indeed a luxury brand as its vision clearly states “Our vision is to be proud creators of the most desirable, modern luxury brands, for the most discerning of clients” (Jaguar Land Rover Corporate Website, 2022) As a matter of fact, Jaguar Land Rover positions itself as a global leader of luxury SUVs, as it is clearly stated in the mission and vision, elements essential in order to define the corporate identity((Ingenhoff & Fuhrer, 2010)

This positioning is achieved through three families of vehicles: Range Rover, Discovery and Defender. Jaguar is the first ever brand to offer a premium all-electric performance SUV, the Jaguar I-PACE.

The company traces its roots back to two iconic British automotive brands: Jaguar and Land Rover. The former, renowned for its elegant and high-performance vehicles, has a storied history dating back to 1922. Land Rover, on the other hand, gained prominence as a producer of rugged and versatile off-road vehicles since its establishment in 1948. The merger of these two legendary brands in 1990 created Jaguar Land Rover, a force to be reckoned with in the luxury automobile market.

These brands have a profound legacy of timeless designs that strike a chord with individuals, creating a unique emotional attachment and sense of intimacy on a global scale. The current model range offered by the company comprises a diverse selection of vehicles, encompassing fully electric, plug-in hybrid, and mild-hybrid options, in addition to the latest diesel and petrol engines. These outstanding vehicles have garnered substantial international demand, resulting in the sale of 425,974 units across 127 countries in the year 2020 (Jaguar Land Rover annual report, 2021). Jaguar Land Rover holds the distinction of being the foremost investor in automotive research, development, and engineering in the United Kingdom (Tata Motors Annual Report, 2022). The organization is renowned for its adept utilization of world-class processes, enabling the creation of innovative British craftsmanship and engineering par excellence. Additionally, it aims to stimulate, engross, and inspire customers worldwide with its unique products (Jaguar Land Rover website, 2023). The design's philosophy embraces elegance, sophistication, and timeless aesthetics. The sleek lines, sculpted contours, and attention to detail in their vehicles exemplify the brand's commitment to creating visually captivating and luxurious experiences.

The company has established itself as a prominent player in the global automotive industry by operating with precision and efficiency across a vast network of manufacturing and technological facilities. It has developed design and engineering sites, vehicle manufacturing facilities, Engine Manufacturing Centre, and Battery Assembly Centre in the United Kingdom.

With reference to the international markets, it has strategically positioned vehicle plants in China, Brazil, India, Austria, and Slovakia, allowing for localized production and enhanced accessibility to customers worldwide. In addition to its position in the luxury segment, Jaguar Land Rover has been selected as a case study company due to its significant focus on digital transformation. In 2021, the renowned British luxury automaker, which has operated as a subsidiary of Tata Motors since 2008, announced a partnership with Tata Technologies, a global company specializing in engineering, product development, and digital services. This collaboration aims to expedite the digital transformation of Jaguar Land Rover's industrial strategy. Anthony Battle, Chief Digital & Information Officer, pointed out that the digital transformation of Jaguar Land Rover will have a crucial role in enhancing business agility as part of the Reimagine initiative and realizing its full potential as a technology leader (Jaguar Land Rover website, 2022).

The demonstration of exclusivity, elegance, and authenticity of the product was exemplified through the launch of the New Range Rover in 2021. This vehicle epitomizes contemporary luxury, showcasing awe-inspiring modernity in its exterior design, and boasting a remarkably refined interior that embraces a minimalist approach, seamlessly integrated with cutting-edge technology. “The New Range Rover embodies a philosophy that will be embedded across our products and our customer experiences, acting as a key differentiator for Jaguar and Land Rover, as part of their transformation into modern luxury brands” (Jaguar Land Rover annual report, 2022). To further emphasize the shift towards the digital realm, Thierry Bolloré, CEO of Jaguar Land Rover, has included among the company's objectives the aspiration to become a “True Digital Leader” (2022). Recognizing connectivity as a vital facet of contemporary luxury, the company is actively implementing fresh strategies and innovative programs to revolutionize connected experiences for customers, thereby accelerating its transformation into a prominent digital leader within the automotive sector. Surely, the attention of the company towards digital transformation has been emphasized by the launch of “InDigital”. It was introduced in April 2021 as a component of the new strategy. In the short span of a year, it has evolved into a hub of digital excellence, housing 250 experts dedicated to analytics, data science, data engineering, and intelligent automation. Through the implementation of a digital revolution involving sophisticated tools and processes, a series of initiatives were provided, culminating in a value surpassing £300 million for the enterprise in FY22. This suite of endeavors encompassed a diverse spectrum of solutions, extending from the amelioration of semiconductor supply chain disruptions through enhanced transparency, to data-driven failure mode prediction, enhancement of customer offerings and digitization of customer journeys, along with business-wide automation aimed at increased efficiency.

Previous professional contacts with individuals within the company have facilitated access to relevant data and information, thereby providing a privileged perspective on the corporate culture, operational policies, and strategic objectives of Jaguar Land Rover. This privileged access has allowed for an insider view of the organization, resulting in a deeper understanding of the challenges and opportunities faced by the company within the automotive industry. By leveraging these preexisting connections, it has been possible to acquire detailed insights into Jaguar Land Rover's corporate and freely consulted relevant information.

CHAPTER III: METHODOLOGY AND DATA ANALYSIS

3.1 Research Design

In this chapter, it will be defined the research approach adopted. Given the nature of the phenomenon under investigation, the existing body of literature, and the type of questions to be addressed, a qualitative research approach has been chosen for this research project. According to Merriam (2015), the positive effect of adopting qualitative research is the fact that researchers can understand the meaning behind people's reasoning and how people make sense of the experiences they have passed through. With time, multiple definitions of what is the meaning of qualitative analysis have been provided. Together, they are able to represent a complete illustration of the peculiarities of this methodological approach. According to Kick and Miller (1968), qualitative research can be described as an exploratory approach that deals with non-numeric information. Its primary goal is to gain understanding and explore phenomena, rather than aiming to explain and control variables. In the same manner, Hoepfl (1997) defines qualitative analysis as "any type of research that yields results that are not based on statistical techniques or other quantification methods". Finally, another important conceptualization was given by Ali and Yosuf (2011), who added that "nowadays, any inquiry that does not involve statistical methodologies is referred to as qualitative". So, keeping in mind all the previous definitions, a qualitative approach involves observing individuals in their own ecosystem, trying to communicate with them and analyzing the complexities deeply while interpreting information from several sources (Basri, 2014). As a result, there are numerous approaches that can be used in academic qualitative research, including case studies, in-depth interviews, focus groups, ethnography, and phenomenology (Trumbull and Watson, 2010). Gaining a thorough knowledge of the phenomenon by examining relationships and meanings—which are multifaceted, complex, and cannot exist independently of actors and researchers—is the common goal of all of these approaches (Parker, 2003).

The research was structured as follows: two main sources of data were utilized to address the research questions. As secondary data, reference was made to the annual report published online by Jaguar Land Rover for the fiscal year 2022, along with other data obtained within the company. As primary data, structured interviews were conducted by the author with individuals occupying specific roles within the areas of analysis under consideration. In order to effectively manage the digital transformation within the company, it is vital for the researcher to comprehend the respondents' perspectives on the phenomenon and the changes occurring. To achieve this, it was imperative to establish extensive communication and interaction with the respondents using their preferred language, while making references to the Jaguar Land Rover 2022 annual report. The outcome of adopting this approach is that the respondents would feel at ease, leading to a rigorous research process that minimizes any potential misunderstandings in communication.

3.1.1 Gioia Methodology

To address the research question mentioned earlier and examine the qualitative data, this study employed the Gioia methodology as a means of analysis. Built upon interpretive research principles, the Gioia methodology utilized in this study aims to capture and depict the participants' perceptions (Gioia et al., 2013; Langley & Abdallah, 2011). This is consistent with the study's goal of examining and understanding how the luxury automotive sector is dealing with digital transformation and what are the key factors considered in this phenomenon. Despite the fact that method by Gioia and other authors belongs to the grounded theory framework (Glaser et al., 1968; Strauss & Corbin, 1990), they have developed a unique and specific approach that emphasizes the creation of new concepts through rigorous qualitative research (Gioia et al., 2013). An elucidation of the aforementioned qualitative technique is given by the authors Gioia et al. (2013). In this academic paper it is reported how to gather data through structured interviews, and what are the guidelines needed to be followed to ensure qualitative outcomes. Indeed, the essence of Gioia methodology is the fact that it helps researchers “apply systematic conceptual and analytical discipline that leads to credible interpretations of data and also helps to convince readers that the conclusions are plausible and defensible” (Gioia et al., 2013). It gives transparency to the process of interpretation of qualitative data, and highlights the steps made to get specific conclusions.

In specific, this approach consists of four distinctive passages: the initial interviews as a foundation, then the transcripts are coded and examined to investigate a collection of first-order concepts, followed by another coding process in order to obtain secondary-order concepts, and lastly a data structure is created. The big difference between first order and second order codes is that the first are descriptive, easy to understand. The second order codes instead are related to a more abstract and analytical dimension. The creation of such data structures allows researchers to not only present their findings from multiple perspectives, but also to provide substantiated evidence in support of any conclusions they may draw. Consequently, this approach convincingly establishes connections between the data and theoretical frameworks (Magnani & Gioia, 2023), representing the process of moving from raw data to identified terms and themes during the analysis (Pratt, 2008).

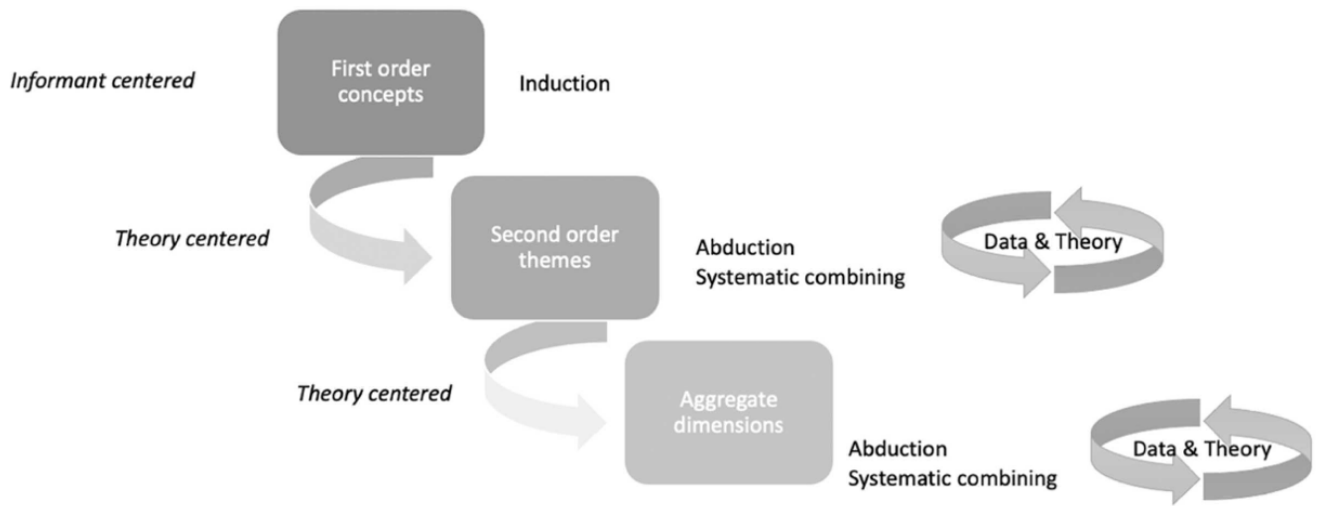


Figure 1. The Inferential Process in developing a Data Structure (source: Magnani & Gioia, 2023)

In research, particularly qualitative research, the process of coding involves the systematic organization and categorization of data to identify patterns, themes, and concepts. The reference to Strauss and Corbin's notion (1998) of open coding suggests an approach to coding that allows for the emergence of informant terms, codes, and categories from the data itself, rather than imposing preconceived categories onto the data.

So essentially the research process involved thoroughly reading the interview transcripts, followed by carefully listening to the corresponding audio recordings and collecting the first-order concepts. Once the cross-interview first-order codes were generated, they were then organized into distinct 'themes'. These specific themes were further consolidated and categorized into a higher-level abstraction, referred to as second-order codes.

3.2. Secondary data source: Jaguar Land Rover Annual Report 2022

Moving the attention on secondary data, they include textbooks, articles, and encyclopedias from several sources such as company websites, scientific journals or university projects.

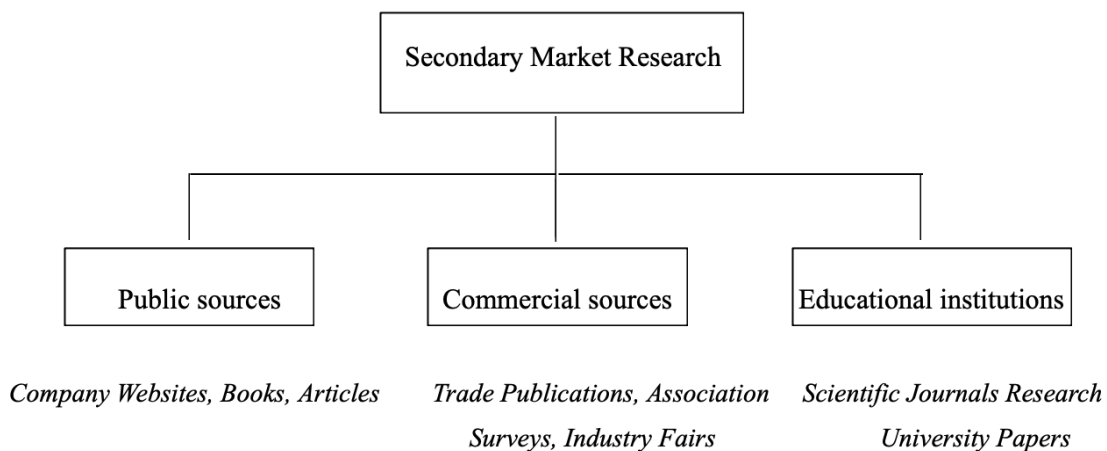


Table 2. Elaboration of the author about the sources for secondary market research (source: Helmold, 2022)

The research project was initiated in March 2022 by consulting two relevant documents: the article “Reimagine” published the 14th of March on Jaguar Land Rover website, concerning the new global strategy put in action by the British company in order to redesign the future of modern luxury, and the Jaguar Land Rover annual report 2021-2022. Precisely, this annual report is divided in two major chapters: the strategic report, with focus on the strategy of the future and the new objectives, and the financial report. Therefore, currently, it stands as the most recent document available. In the context of the empirical research undertaken in this thesis, the "Jaguar Land Rover 2021-2022 Annual Report" serves as a secondary data source. As Harrell and Breadly (2009) suggest, secondary sources encompass preexisting data that researchers can utilize for their analysis.

The study was able to derive intriguing and unforeseen insights from the analysis of the aforementioned report. Firstly, it has been reported and highlighted the importance of flexibility and agile business model in order to survive to the next future. Indeed, Businesses have had to adapt swiftly and flexibly to an unprecedented series of events. Following the reasoning, the future of automotive industry will see the rise of several crucial trends, such as:

- Energy transition - a definitive shift towards environmentally friendly transportation.
- Supply chain transition - the reconfiguration of supply chains to enhance resilience.
- Digital transition - the widespread adoption of Artificial Intelligence and Machine Learning.

To cope with the aforementioned changes, the luxury automaker has decided to embark on a strategy called "reimagine," which is defined by Thierry Bolloré, CEO of Jaguar Land Rover (2022) as “Our roadmap to accelerate our transformation into a modern luxury business, with its supporting transformation plan, *Refocus*”. During the timeframe spanning from 2021 to 2022, the organization accomplished a heightened capability as an agile, entirely data-driven, digital enterprise through the establishment of InDigital, a crucial component of the Refocus transformation program. (Thierry Bolloré, 2022).



Figure 1: The main themes setted by the company in the annual report of 2022 (source: Jaguar Land Rover Website, 2022).

3.3 Primary data source: structured interviews

Structured interviews were chosen as the primary source of data for the analysis. Before examining what a structured interview is, it may be helpful to first explain how and why questions in qualitative research are framed in that manner. In this form of inquiry, questions used as an investigation tool frequently begin or include phrases like what, how, or why. This is because the primary goal of a qualitative investigation is to explore, observe, and describe what happens in a specific environment, how it happens, and what significance the participants attribute to it (Taylor et al., 2015). Thus, the questions are presented in order to get "in-depth knowledge" of the phenomenon, having in mind however the impossibility of capturing a "genuine ontological reality" (Parker, 2003).

As Helmold (2022) reports, in-depth interview is a qualitative research technique used to follow intensive one-to-one interviews where research aims at exploring a specific product, situation or objective. Here some advantages of this technique can be illustrated:

- Possibility for the interviewers to build real contact with participants in order to make them feel relaxed, generating more reliable and spontaneous answers. In this way, the interview seems to be an enjoyable conversation where insightful responses about sensitive themes can be gathered.
- Interviewers need a smaller number of participants to gather properly and relevant insights.
- Researchers have the opportunity to interact directly with the interviewee, ask follow-up questions and guide the conversation.
- Interviewers can focus their attention on different aspects such as body language, tone of voice and attitude towards specific topics.

Interviews, according to Harrell and Bradley (2009), are used by researchers to collect viewpoints and perceptions as well as background information, such as an expert's knowledge of a specific "subject, facts, and descriptions of processes." Interviews frequently have both characteristics, as in the case of the qualitative research in this thesis. On the other hand, Harrell and Bradley point out that neglecting or treating questions concerning the interviewee's background knowledge superficially during the interview can have an impact on the quality of the data collected.

The amount of control that the researcher has during interaction with respondents is a key factor that the researcher must consider when choosing to use interviews as a source or as one of the data sources in qualitative research. In this regard, three types of interviews can be distinguished: unstructured, semi-structured, and structured.

In unstructured interviews, the researchers have a strategy to follow as a guide, but they have minimal power over what respondents say. As a result, the discussion might take multiple directions, and the data gathered are variegated and nuanced.

Unstructured interviews are intended for those who plan to spend a significant amount of time in the social reality or in the community they are exploring. In semi-structured interviews, the researchers always follow a reference guide and at the same time there are subjects and questions that must be covered. This form of interview is mainly conversational. Semi-structured interviews are suitable for researchers who want to get to the bottom of a topic through the responses they hear throughout the interview. Finally, there are structured interviews, which are those in which the researcher has the highest control. The questions asked to respondents in this form of interview are all the same and are asked in the same order. This has the obvious advantage of cutting the number of topics not covered during the interaction and the possibility for the researcher to reduce unexpected reactions (Fowler, 2002). A disadvantage of structured interviews is that, when an interviewee does not comprehend a question, it is hard to explain it to him unless through a written explanation given before the interview or by leaving the respondent to interpret the phrase or topic in question. The repetition of the question is the only possible explanation there.

Thus, with respect to the various interview methodologies, this research project has opted to employ structured interviews as the primary data source. This decision has facilitated a heightened degree of authorial control and direction towards specific themes, through the consistent deployment of uniform sets of questions. Additionally, the meticulously structured questioning framework has facilitated the comparative analysis of responses across distinct areas of interest, such as Marketing and Customer Service, pertaining to identical subject matter.

Going deeper, the three main areas of the research analysis were: Network Department, Marketing Department and Customer Service Department. It has been chosen to focus the study on these three main departments because they have been found to be the areas within the company with fewer accessibility issues. Having had prior contact with some of the individuals employed in these sectors has made it easy to gather data and valuable information for the research. Furthermore, as mentioned in the previous chapter, network, marketing, and customer service represent the most influential areas in terms of digitalization and innovation in the automotive industry. An important aspect to specify is that the three areas exhibit structural differences among them. For instance, the customer service area follows a significantly more data-driven approach compared to the network area. Alternatively, the Marketing area is much more focused on delivering a unique experience, studying extensively the habits and needs of its customer portfolio. Consequently, during the interviews conducted with the various department managers, an initial attempt was made to follow a consistent structure, addressing topics such as operational implementation and their opinion on the latest innovative trends in the automotive industry. However, subsequently, each interview took on its own specific direction. Therefore, the responses reflected precisely this different approach that was present in each specific case.

3.3.1 Interviews

Upon identifying the research inquiries and determining the most suitable research approach to address them, contact was established with the individuals chosen to participate in the interview process. Considering the prevalence of digitalization within the automotive sector today, it was imperative to engage individuals who possess expertise in this field and have occupied their respective roles for an extended duration. This choice was driven by the desire to explore the changes and innovative working methods that have emerged as a result of this transformative process.

Given the aforementioned characteristics of qualitative analysis, which were outlined earlier, it is important to note that this research methodology does not rely on large population samples. Instead, it employs small, targeted samples of respondents who can provide crucial and accurate information (Sale, Lohfeld, & Brazil, 2002). Consequently, a total of five interviews were conducted, spanning from mid-April to the first week of May.

Respondents	Respondent's role within the company
Respondent n.1	Customer Service Director
Respondent n.2	Customer Service Marketing Specialist
Respondent n.3	Network Development Senior Manager
Respondent n.4	Dealer Operations Specialist
Respondent n.5	Marketing Director

Table 3. Elaboration of the author about the respondent's role within the company

The respondents were all contacted by email. After receiving affirmative responses to the request to be interviewed, each interviewee received another email containing two attachments:

- a document containing the presentation of the research, in which the author introduced herself and explained in what capacity they had been contacted; then a general overview of the thesis project was presented. All the material was sent in Italian in order to facilitate interviewees and be more practical in communicating the object of the research.
- An informed consent form for the interviewees, stating that the data and information expressed in the interviews would be treated confidentially and for research purposes. Additionally, permission has been requested to record the conducted interviews in order to have a transcription available for further analysis. It was mentioned again verbally before starting each interview.

With respondents 3, 4, 5, the interview was conducted on Microsoft Teams, with camera on both by the author and the respondents. While, for respondents 1 and 2, the interview took place following an in-person meeting at the Jaguar Land Rover offices based in Rome. The interviewees provided their available time slots, allowing for a face-to-face meeting to conduct the interviews.

3.4 Data Analysis

Following the initial editing of the transcripts, all five interviews were subjected to a first coding procedure, which aimed to maintain fidelity to the original language utilized by the informants (Gioia et al., 2013). This step yielded a total of 110 initial codes. These initial codes were then transcribed into an Excel sheet. In a theoretic approach, the set of informant terms, codes, and categories that emerge early in the research it is called “open coding” (Strauss & Cobin, 1998).

By employing the concept of "open coding" and employing a constant comparison approach between the initial codes and corresponding excerpts, a systematic process of categorization and labeling resulted in the identification of 28 first-order concepts.

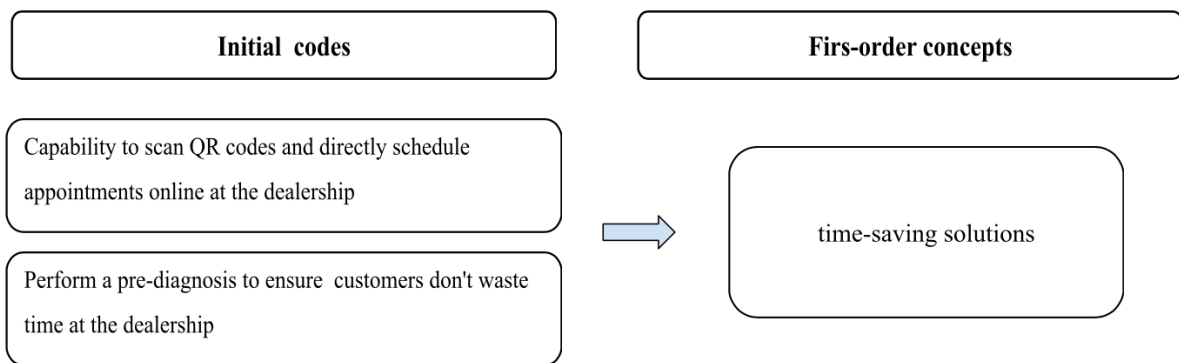


Figure 2. Example of First-order concepts development.

To clarify, the process involved transcribing all 110 initial codes as direct quotations from the respondents. These 110 quotations were then meticulously categorized and subdivided into 28 first-order codes, each carefully titled to maintain the original language employed by the informants. For instance, the first-order code "Customers are always looking for time-saving solutions and digitalization help this process" was derived verbatim from the quoted responses, ensuring precision and fidelity in representation. The list of First-order concepts and their respective codes was displayed in Excel. This analysis aimed to establish Second-order themes.

To achieve this, the First-order concepts were manually analyzed through axial coding, an approach for generating a spontaneously emerging set of categories and their associated attributes that are suitable, functional, and pertinent for incorporation into a theory (Kendall, 1999). This step underscores the significance of the researcher acting as a "knowledgeable agent" and encourages them to question "what's going on here?" to comprehend the data on various levels (Gioia et al., 2013, p. 20; Strauss & Corbin, 1990).

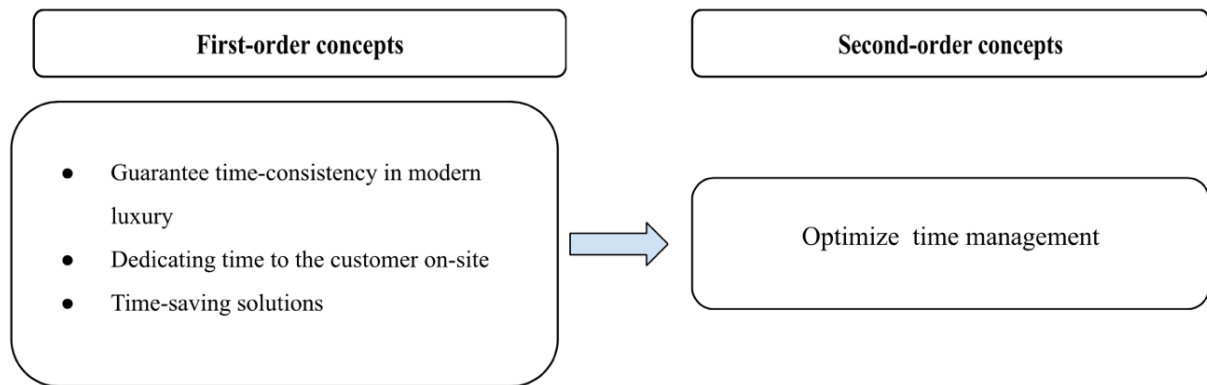


Figure 4. Example of Second-order concepts development.

At the end, the outcome of the analysis gave 9 Second-order concepts: digital evolution at the support of customer relationship, collecting data with digitalization, optimize time management, new logical evolution towards used cars, remote communication, yesterday vs today, adaptation to future customer's necessities, seamless customer experience, usage of digital tools. After the development of Second-order themes, the methodology delineates the process of comparing and refining the emerged themes into more concise and aggregated dimensions, also referred to as "core categories" that function to encapsulate the elements of an emerging theoretical model (Langley & Abdallah, 2011, p. 17). The final step of the Gioia methodology involves establishing a structured representation of the First-order concepts, Second-order themes, and aggregated dimensions, thereby illustrating the researcher's progression in developing them.

In this work, the nine aforementioned Second-order concepts have given rise to three main aggregate dimensions entitled: savings advantages, the future is controlled remotely and the synergy of digital tools and seamless experiences. All these dimensions have the common characteristic of answering and analyzing the research question of this thesis. Indeed, each of them aims at giving a specific perspective and explain how the use of digitalization mediates the business processes of an automotive luxury industry.

The aggregate dimensions are illustrated in the data structured, as it is shown by Table 4.

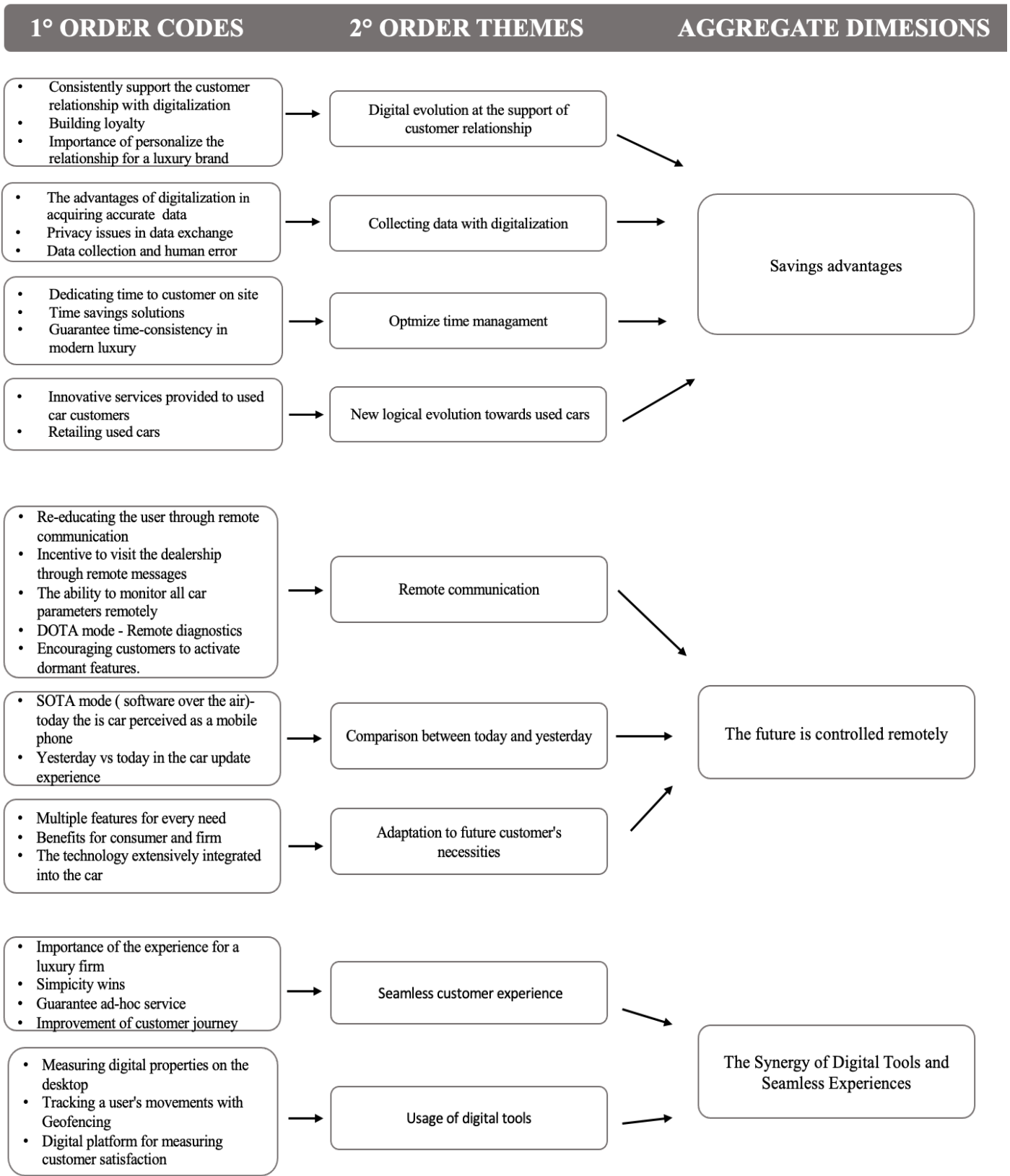


Table 4. Elaboration of the author showing the data structure using Gioia methodology

Indeed, in the data structure, 3 second-order themes emerged which made up an aggregate dimension entitled: saving advantages, the future is controlled remotely and the synergy of digital tools and seamless experiences.

3.4.1 Saving advantages

Considering “savings advantages” aggregate dimension, optimizing time management is the most frequently mentioned reason behind the exploitation of digital tools. As Respondent 3 highlighted, the first element to report is the importance of time in the field of modern luxury. “Today, time is valuable. It is the element of modern luxury. It is important to dedicate time to the customer. Allocating time to the customer means explaining the work done when their car has been repaired, going over the invoice... Building value, storytelling, and many elements make the difference. Today, we must create this empathic logic, essential for a brand that ranks in the world of luxury”.

Following this perspective and assuming time as a key element in luxury, automotive companies nowadays rely on digitalization in order to limit time waste for the client on-site. For instance, as Respondent 2 reported: “Nevertheless, we can perform a pre-diagnosis of the car to ensure that when the customer visits the dealership, they do not waste time if there is a specific issue, and we promptly fix the problem”.

Moreover, the evolution of digitalization has given rise to the possibility of scanning a QR code and directly scheduling an appointment online at the dealership. In this specific theme, the Respondent 1 and 2 emphasized the innovative approach that contributes to improving the simple action of booking an appointment, avoiding endless calls and stressful inconveniences. So, it is clear that from one side luxury automotive retailers need to dedicate time to their customers, especially when they are on-site by providing essential information and prefer quality instead of quantity concerning time. On the other hand, it is relevant to focus on putting in action all the possible activities that allow customers to save time during the purchasing process.

Therefore, after the theme of time management, all the respondents supported and agreed about the importance of digitalization as an element of support in building a personalized and consistent relationship between luxury brand and client. Respondent 5 enhanced that “The client can be aware of a specific event or new launch from the navigations he has done. Me, as a marketing responsible, I have delved into news seen on the Land Rover club app, and I made only the news of his interest appear, for example. By this way, the client felt more pampered, thus getting closer, falling more and more in love with the brand”. A brand's ability to deliver content that is tailored to its audience allows customers to see the brand as something they can have a genuine relationship with.

In general, it was observed that all the respondents, in a different manner, have brought to light different perspectives concerning how digitalization improves the process of saving and simplifying processes. More specifically, digitalization implies saving time dedicated to bureaucratic procedures, such as digital signatures for contracts with dealerships, as well as within the customer experience path. In addition, it makes the process of collecting data and being informed about every customer preference easier. Continuing with this line of thought, digitalization serves as a means of savings. Respondent 1, responsible for the customer service

department, expressed that “digitalization plays a crucial role, enabling efficiency and facilitating the acquisition of consistent and valuable data. For a luxury brand such as us, the essential aspect is obtaining important and well-structured data through the full exploitation of digitalization”.

Then, he shifted the conversation towards another relevant theme: human error. Indeed “Automated systems can collect and store data in a standardized way, making it easier to analyze trends, make informed decisions and develop insights. Many dealerships are not as skilled and diligent in collecting all the data, such as mobile phone numbers, and then correctly uploading them into our systems, in this case, the error stems from human inefficiency. To overcome this pain point, the telephone number is provided directly by the customer in an online form, and then it is automatically uploaded on the customer’s profile. In this way the human error is fixed by the presence of an automatized process”. In this perspective, the marketing side remarked that “Thanks to the innovations in digitalization, customers are not contacted using communication tools that harken back to the Stone Age. Especially today that generations are used to technology, providing interactive and at the same time easy- to- use communication tools are fundamental for being competitive in the market”.

In a perspective focused on resource optimization, it is imperative to mention the importance and increasing prominence attributed to the team of pre-owned automobiles. Indeed, the insights gleaned from the analysis confirm that the attention towards the pre-owned vehicle market is progressively intensifying, especially when it successfully embodies the allure and innovation reminiscent of a new vehicle.

Respondent 3, committed to manage the retailers network department, confirmed that “For the next customer who will buy a used vehicle, the dealer will enable that car, activate certain features, and make that pre-owned car even more appealing. So, you could end up purchasing a used car that aligns much better with your needs, beyond what was configured initially.”

The development of this novel future paradigm regarding pre-owned automobiles is achievable solely through the progression of digital technologies. This advancement enables the transference of distinct configurations and supplementary attributes from one vehicle to another, thus affording the customer a personalized experience despite the acquisition of a previously owned automobile. The company, taken as a case study, wanted to emphasize that in today's landscape, numerous customers are intrigued by this revolutionary approach that will unfold in the future. “We are striving to implement such a mechanism at the dealership: usually, when you buy a used car, you don't have everything that comes with buying a new car. This is another logical evolution that we want to achieve over time, enabling new functions, introducing all the facilities that a Range Rover client had in his previous car. The surprising effect is that even the used-car customer will perceive innovative services he didn't expect”.

This new perspective cannot be contemplated without acknowledging the presence of online digital platforms as a means of purchasing a used car. Online platforms allow dealerships and individuals to create comprehensive listings for each used car they have available.

As the Marketing Director stated, “digitalization has transformed the way used cars are presented to potential buyers through online platforms. The combination of detailed information, high-quality photos, virtual tours, and interactive features offers a comprehensive and convenient way for buyers to explore, compare, and evaluate vehicles from the comfort of their homes”.

Hence, in parallel with the rise of cutting-edge and innovative used cars, the landscape is witnessing the rapid growth of dedicated online platforms where various prices can be compared, and individuals can select the car that best suits their specific needs and requirements. Within this context, the presence of an online digital channel has not only elevated sales conditions but has also fundamentally transformed the dynamics of the retail arena.

3.4.2 The future is controlled remotely

The progression towards remote control and digitalization within the luxury automotive sector constitutes a prominent overarching theme that arises from the analysis conducted. This advancement appears to hold utmost significance in addressing the research inquiry at hand. In the present context, the synergy between digitization and automobiles is exemplified by exceptional phenomena, such as updating software process. What emerged from the interviews is that current vehicles engage with the SOTA mode - Software Over the Air. This underscores the parallelism with updating a smartphone, as today's exceptionally innovative and advanced vehicles incorporate mechanisms bearing strong resemblance to those of a mobile device. “Today we are observing the transition from a mode called SOTA (Software over the air), which is exactly what happens with cell phones. An update icon appears on your phone, you tap it, and it updates. So, we release software, and the car updates automatically to achieve the same configuration as the newly released iPhone.” explained Respondent 1.

Moreover, a surprising surge in remote vehicle control is projected for the future, leveraging digitalization as a propelling force behind forthcoming processes. A pivotal concept that comes to the fore is the 'DOTA Mode' (Diagnostic Over the Air), which embodies an innovative modality through which vehicles are poised to be managed from a remote standpoint. This technological paradigm facilitates the transmission of software updates and alert communications to vehicles, obviating the necessity for a physical on-site intervention. The articulations of the Dealer Operations Specialist accentuate the innovative and profoundly digital nature of this prospective trajectory. This, in turn, intimates that the transition towards remote control marks a momentous juncture in shaping the trajectory of the luxury automotive industry.

As reported by Respondent 4, Dealer Operations Specialist, " We, as promoters of automotive modern luxury, could perform remote diagnostics, connecting to the car remotely through the development of DOTA mode, which stands for Diagnostic Over the Air. This means being able to remotely diagnose the vehicle, understand what is working and what is not, creating an entirely new mode of remote interaction. Consequently, we are

capable of addressing certain issues without necessarily requiring the customer to bring the car into the workshop."

The car of the future will be notably characterized by its digitalization. The central interplay between the vehicle and the remote control facilitates prompt intervention in technical aspects that require supervision. In practice, this means that the customer receives proactive notifications as specific warning indicators, emblematic of potential vehicular issues, are about to illuminate.

As Respondent 2 remarked, "We have the connected car, so the vehicle is equipped with built-in SIM cards, and through these SIM cards, we monitor many car parameters. Even before they appear on the car's interface, we start receiving these signals remotely, and we receive all of them in parallel. After that, we will be able to contact the client and inform him of the probable alert messages he will receive. It is incredible and exciting.". However, Respondent 2 highlighted the fact that it is still essential to stimulate customers to go visiting the dealership, even if the majority of interaction can be done remotely. He reported that "Sometimes, the customer is encouraged to visit the dealership using messages that appear directly on the car's screen."

This is because, by promoting the visit on-site, they can discover the latest car lines or be attracted by new accessories for instance.

Frequently, remote messages can encompass communications designed to reorient the customer towards proper vehicle usage. The Customer Service Director confirmed that "perhaps there wasn't just a technical component to solve, but there is also a driving style that isn't consistent with what was purchased. Some of the communications are educational in nature". For instance, tire pressure problems were linked to incorrect handling of the vehicle. In such scenarios, remote connectivity allows for notifying the customer about certain improper behaviors to steer clear of, thereby ensuring the vehicle and its components are maintained in the best possible condition.

Looking ahead to the future scenario, in addition to the aforementioned phenomena, the luxury automotive industry will be poised to accommodate specific needs or requirements, even if only for a limited duration. The FOTA mode - Features Over the Air - will empower vehicles to meet upcoming demands by seamlessly integrating particular accessories or functions for a defined period of time. As the Customer service marketing specialist explained "We are considering releasing Features, Features over the air. The car is initially equipped with most of the accessories: heated and ventilated seats, fog lights, panoramic roof, everything you need. But you are not paying for it because you chose something else or maybe you chose two or three of these accessories, but not all of them. In this way, technology is providing a service or feature adapted to a specific context or occasion: for instance, if you live in Rome, you probably don't need a heated steering wheel and you didn't pay for it, but if you go for a week-long skiing holiday in Cortina, it's freezing cold, and you want it? The Jaguar Land Rover Android app can activate it for you." Through this approach, customers are not compelled to make immediate purchases, but rather, they are encouraged to contemplate, 'Is it essential?' This allows them to deliberate and potentially opt to incorporate the feature at a later time, in alignment with their

evolving requirements." In addition, thanks to FOTA mode, the customer can freely, with the help of an app, choose what to do with the car, and can do it completely transparently without having to ask anyone. Essentially, a self-managed data model has been created.

On the other hand, companies as well gain some benefits, as the Dealer Operations specialist reported "As a company, we've standardized production. So, we can produce far fewer things, but include everything. In other words, reduce our manufacturing costs and deliver more value."

What emerged clearly from the analysis is that the future perspectives of luxury automotive recognize digitalization as an enabler of future processes, based on remote communication. This will be the innovative approach able to guide the continuous and rapid changes in customer's necessities, making the car as much as possible. Remote communication enables to react promptly to every technical problem, inform customers with useful suggestions to have a better drive experience in terms of performance, and lastly marking a turning point between today and tomorrow.

3.4.3 The synergy of digital tools and seamless customer experience

The final aggregate dimension takes its name from the fusion of two major themes that have emerged: the actual implementation of digital tools, and the necessity to provide consumers with the smoothest possible purchasing experience.

During the interviews with the Marketing Director and the Customer Service Director, significant applications of specific digital tools were presented with the aim of enhancing the customer journey. Specifically, the first tool mentioned was Geofencing, a sophisticated technology that involves the creation of virtual boundaries, known as "geofences," around specific real-world geographic areas. These virtual perimeters can be defined using GPS, Radio Frequency Identification, Wi-Fi, or cellular data, and they enable businesses to trigger specific actions when a device, such as a smartphone or a vehicle, enters or exits the designated geographical area.

For an automotive company, "it is a tool that helps, for instance, to identify and monitor movement within a specific area, the activities a user engages in, or the activities a user visits after or before interacting with us. It involves delving into data quality and defining certain actions and reactions that you can implement on clusters" It entails pinpointing specific points within an area and mapping them with a virtual 'fence', a barrier. We have mapped our dealerships and consequently map points of interest" (Customer Service Director). Moreover, Respondent 5 added some details related to the sphere of marketing and gave an interesting example: "We have mapped all the pet points because we have accessories for cars precisely targeting this customer group. With Geofencing we are able to know within our clients who are the ones that go to pet stores, and so who could be possible targets for pets accessories. In this way, a targeted and studied advertising will

be organized in order to reach exactly the potential customers who are interested in every kind of accessories related to the pet's world".

These practical instances substantiated what has been consistently reported in the existing literature: the automotive domain is undergoing incremental innovation by adopting technological tools that are made attainable solely through the evolution of digitization. Under this perspective, the assimilation of digital instruments unquestionably ensures a competitive edge for an enterprise, positioning it on the cutting edge and equipping it to proficiently harness the resources bestowed by innovation.

As the Marketing director reported "For instance, I recognize the most intimate interests like sports, hobbies, etc. But do I actually recognize a customer's interest even in the brand's events? Well, that is not a recognized interest. I mean, it's an interest the customer has, and even if I have not recognized it under the name 'Mario Rossi,' I know that he is passionate about Jaguar or Land Rover gatherings. For him, it is a significant source of pride and an avenue for getting closer to the brand and surpassing the competition."

Continuing the examination of concrete applications of digital tools, the Marketing Director aimed to emphasize the existence of qualitative tools tailored to assess the usage of digital properties on desktop or laptop platforms, for instance. He has pointed out the importance of digital applications related to qualitative approach. In other terms, he reported that "Lately, we have been incorporating additional tools that are a bit less quantitative, but more qualitative in nature", adding that "These tools precisely measure, for example, the usage of digital properties on desktops using a spectrum of colors. This helps you understand the most clicked areas on a page and what they enable you to do. You can even track mouse movements from one CTA to another. These are targeted approaches for qualitative monitoring of visits."

The tangible and practical outcome obtained from this monitoring of properties is for instance that, "there was an effective Click Through Rate, albeit positioned below the first screen. By discerning where customers are inclined to click on the website page, I am then able to elevate its placement, enhancing its visibility." (Marketing Director).

Running parallel to the previously discussed topic, all the interviewees have highlighted the necessity of offering both current and, especially, future customers a seamless experience.

They reported firstly the high relevance of the customer experience when dealing with luxury products, especially during the last years, especially for today's individuals who have increasingly high expectations and who are fully familiar with the digital reality, almost as if they are accustomed to it. Today it is possible for instance to track the entire customer journey, using tools such as the online configurator or requesting an online quote.

"Today, customers can still be amazed by digital innovations, but tomorrow the customer audience that will come to buy our cars will almost take digital interaction as well as personalization during the customer journey for granted.". Referring to what was previously mentioned, respondent 4 explained a special initiative that the company has decided to implement in the next future to offer a personalized and innovative customer

experience to its clients: “We have created entirely empty rooms where the customer has the opportunity to see various color schemes projected on the walls and to concretely experience the available textures for the interior seats... This way, the experience is complete, projecting the actual product into the consumer's mind, with the added opportunity to try and touch the materials.”

Absolutely, within the luxury sector, including the automotive industry, delivering more than just high-quality and prestigious products is essential. It's about offering a personalized experience, akin to what occurs in other sectors. "In the world of luxury, customers are drawn closer to a specific brand more than others when a significant amount of personalization is done. In fact, in the world of fashion and jewelry, for instance, personalization goes over the top to ensure that a customer chooses one brand over another" (Marketing director). As respondent 1 said “Thanks to digitalization, the customer journey has been enhanced, providing more convenient options and interactions”. It goes without saying that providing a seamless customer experience to customers means using digitalization in order to simplify all the internal processes. This means that a customer that has already been recognized online, the moment he walks into the dealership and provides his name, the dealer already knows everything. He doesn't need to repeat anything. He doesn't have to reiterate his preferred models, nor his purchasing preferences, for instance. “Just by checking his latest configuration settings on our website, it is simple and quick to know what could interest him” (Network development senior manager).

In summary, the analysis has highlighted three key overarching dimensions that characterize digitalization as a transformative force within the luxury automotive sector. To elaborate, it opens up numerous avenues for cost-saving, introduces the prospect of remote vehicle control, and ultimately enhances the customer experience by making it faster and more seamless, thus catering to customer needs.

CONCLUSIONS

Digitalization is redefining traditional business models in the automotive industry, with a strong emphasis on delivering value to customers and leveraging cutting-edge software platforms to swiftly attract a broad customer base. Moreover, the luxury goods market has seen significant dynamism, with the automotive sector standing out as one of the most vibrant segments. This industry is highly competitive and lucrative, with a focus on superior performance, advanced features, and luxury. Several factors drive the demand for luxury cars, including rising disposable incomes, urbanization, and a growing preference for luxury and comfort. The luxury car market has also witnessed changes due to emerging trends such as electric and hybrid vehicles, driven by technological advancements and evolving consumer preferences. Understanding the impact of digitalization on the luxury automotive sector is crucial given that luxury companies differentiate themselves through customer experience, technological excellence, and product exclusivity.

The research project aimed to provide a detailed analysis of the evolution of digital transformation within the refined landscape of the luxury automotive industry, addressing the research question that has emerged. The choice of delving into three main domains (customer service, network management and marketing) helped to comprehend better the phenomena in all its aspects and highlighted the significant importance of each one within the sector. To examine and respond to the research inquiries mentioned earlier, the study has derived specific insights by employing Jaguar Land Rover as a case study. Indeed, Jaguar Land Rover emerges as an exceptional presence in the global automotive sector, distinguished by its unmatched cognitive capacity to foresee the evolving luxury requirements of its clientele, considering the theme of digital transformation as a defining aspect within its core business. For instance, "Reimagine" strategy is a proof of the key trends of business models for the future survival: energy transition, supply chain reconfiguration, and digital adoption. Furthermore, "InDigital" initiative has been integrated into this strategy in order to transform the modern luxury business of the company.

This investigation has clarified the future scenario through an in-depth qualitative analysis, utilizing Gioia methodology which provided a systematic and structured approach to textual data, offering clear guidelines for data collection, coding, and interpretation, ensuring rigor in the research process. Moreover, it could capture the richness and complexity of the content in respondents interviews underlying meanings and relevant insights.

The analysis of the luxury automotive sector has revealed three key overarching dimensions that highlight the transformative force of digitalization: Digital tools are instrumental in optimizing time management, a relevant element in the world of modern luxury. They enable luxury automotive retailers to dedicate more time to their customers by streamlining processes. In the luxury automotive industry is not only about embracing technology but also about using it strategically to enhance the customer experience, improve operational

efficiency, and anticipate customer needs. These dimensions underscore the critical role of digitalization in shaping the future of luxury automotive brands and their ability to stay competitive in an evolving market. Furthermore, the second key concept that has been highlighted is how the concept of the automobile is undergoing a radical transformation, heralding a future in which the car will no longer be comparable to the traditional concept we are accustomed to. The car of tomorrow takes on a strongly technological essence, capable of anticipating the needs of its users and adapting agilely to changes in the environment. This progress is made possible thanks to the development of remote-control systems, which give dealerships and companies involved in this sector a higher degree of supervision over the vehicle's performance, resulting in an overall improvement in the vehicle's performance.

As confirmed by the literature review, the third key element emerged from the analysis is the ongoing significance within the luxury automotive sector of providing and ensuring optimized solutions in terms of speed and personalization for customers, in order to meet every individual need. The focus on delivering a seamless and personalized customer experience in the luxury automotive sector is confirmed by the evidence of phenomena such as ad-hoc configurations, online appointments and remote car diagnostics. Digitalization facilitates a deep understanding of customer preferences and streamlines interactions between customers and dealerships, creating a more convenient and satisfying journey.

Although several academic studies concerning innovation and digital transformation in the automotive industries have been developed, the peculiarity of this research project was the attention towards luxury sector of the automotive related to digital evolution. The possibility to directly collect relevant information by interviewing individuals committed in a luxury automotive firm allowed the author to gather coherent and reliable themes of research.

As further research, since the automotive sector is subdivided in different categories, other firms should be analyzed to observe different conclusions obtained in this case study. That is, economy and premium segment market could be compared too, in order to see how digitalization in this specific case acts and shapes the business. Also, as the aforementioned segments needs to provide cheaper solutions to the customer, it might be interesting to observe what kind of challenges and limitations firms need to face when implement digitalization at every step of their operating system.

APPENDIX

Appendix A

Transcript of the interview with Customer Service Director

Interviewer

Buongiorno, la ringrazio di essere qui e di dedicarmi parte del suo tempo. Come scritto via mail, sto svolgendo una ricerca per il mio elaborato di tesi magistrale sul tema della digitalizzazione all'interno del settore luxury dell'automotive. Per questo, le vorrei fare alcune domande in merito ad alcuni temi importanti. Le chiedo nuovamente il permesso per registrare l'intervista e le garantisco il trattamento dei dati in maniera confidenziale.

Respondent

Buongiorno Elena. Certo, proceda pure con le domande

Interviewer

La prima domanda che le pongo è in che cosa consiste l'area customer service all'interno dell'azienda? Quali sono le sue principali funzioni?

Respondent

Allora diciamo che è un'area che prende in mano il rapporto col cliente, tutto quello che può succedere al suo veicolo, nell'esperienza, quello che chiamano l'esperienza di possesso, perché mediamente una casa automobilistica si impegna a Immaginare, pensare, realizzare e produrre un'auto. Chi immette sul mercato il prodotto una volta finita è il marketing commerciale, mentre l'area PR contribuisce creando eventi e interazioni con i clienti per arrivare a venderla. Quando la macchina viene venduta e poi consegnata al cliente, interveniamo noi e. Da lì in poi è un rapporto che ci Aiuta a poterla seguire e assistere. Supportare il cliente in tutto quello che ha un guasto piuttosto che una manutenzione piuttosto che un accessorio piuttosto che una rimodulazione. Il cliente ha bisogno di montare un gancio traino? Deve andare a casa con una nuova roulotte piuttosto che comprare qualsiasi accessorio che gli serve per vivere al meglio l'auto? Ecco in questi casi interveniamo noi come area di assistenza al cliente. Ed è un percorso particolare perché noi non ci occupiamo di momenti emozionali, no? Il marketing lavora per mesi al fine di far scattare la scintilla, il commerciale ti consegna la macchina da quando è prodotta. Quindi noi lavoriamo su un periodo lungo mediamente 4- 5 anni, è il primo possesso di un'auto e poi? Il ciclo di vita che vediamo noi lo compariamo guardando alla longevità del veicolo tra i 10 e i 12 anni; quindi, il circolante, ovvero volume di veicoli che circolano in Italia è calcolato mediamente a 12 anni sui veicoli che si presume abbiano ancora un valore tale

per cui possiamo noi intervenire dando ricambi originali e facendo assistenza a persona. Il periodo conteggiato dei 12 anni è un periodo importante perché questi 10-12 anni per noi pesano circa 200.000 macchine che girano in Italia; quindi, il nostro reparto è tutto focalizzato a supportare 200.000 clienti con le macchine più giovani, quindi la garanzia, i processi, le manutenzioni tagliandi. Per quelle anche più vecchie c'è anche la problematica del tagliando e il tema delle carrozzerie.

Il tema dello studio che sto portando avanti è, appunto, l'implementazione della digitalizzazione in tutti questi processi che vengono effettuati e quindi faccio una domanda un po' più di carattere generale. Al giorno d'oggi temi come elettrificazione, connettività e anche guida autonoma sono argomenti molto discussi: quale è la prospettiva?

Respondent

Certo, alcuni un po' più proiettato al futuro, come la guida autonoma.

Interviewer

Volevo sapere dal punto di vista anche proprio di gestione del cliente, come sarà la prospettiva futura rispetto a questi trend?

Respondent

Guarda la digitalizzazione è per noi un elemento fondamentale perché diventa un enabler di tante strategie. Quindi un attivatore, un attuatore, un facilitatore, può essere oggi vista come un abilitatore della trasformazione dei processi in essere. È sicuramente un abilitatore di processi futuri che oggi ancora non sono neanche tangibili sul mercato. Faccio un esempio: Abbiamo la l'auto connessa, quindi la macchina è nativa con già delle SIM a bordo e da queste SIM noi monitoriamo tanti parametri dell'auto, alcuni sono ovvi perché sono parametri che l'auto stessa condivide con l'utente, quindi attraverso il pannello di controllo, attraverso le Spie, attraverso il monitor l'auto ti dà dei segnali, ti dà dei messaggi, ti dice “spia motore accesa” oppure “presta attenzione e vai a fare un controllo” oppure stai finendo la di blu, “cambia le pasticche freni”.

Interviewer

Quindi anche sicurezza, ovviamente.

Respondent

E anche soprattutto, sicurezza, questo è. Prima ancora che appaia nell'interfaccia sull'auto, noi cominciamo ad avere anche da remoto questi segnali, li riceviamo tutti in parallelo. Successivamente aiutiamo l'utente: quindi cosa succede? che noi, avendo questa evoluzione al digitale, possiamo supportare per esempio la nostra relazione con il cliente. E quando una spia è accesa noi lo vediamo, possiamo chiamare noi

direttamente il cliente. Noi come team non chiamiamo nei minuti successivi a quando osserviamo il fenomeno, ma lo facciamo nei momenti più coerenti con delle comunicazioni strutturate. Per esempio, per cinque segnali che riceviamo mandiamo delle comunicazioni strutturate al cliente. Alcune comunicazioni sono comunicazioni di educazione. Perché, per esempio, quando ci arriva il segnale che un filtro si sta intasando, probabilmente non c'era una componente tecnica solamente da risolvere, ma c'è anche uno stile di utilizzo dell'auto che non è coerente con quello comprato. Allora in questo caso, mandiamo una Newsletter e gli diciamo “abbiamo visto che ti si è accesa la spia? Siamo a tua disposizione se vuoi passare in concessionaria”

Altro esempio è che si avvisa il cliente dicendo “Sappi però che se tu percorri per 20 minuti una strada velocità non costante porti il catalizzatore ad avere difetti “Di conseguenza, si suggerisce al cliente di farsi un Weekend fuori porta, un viaggetto, dove la macchina può andare, sfruttando l'auto al meglio.

Ci sono cose che invece deve fare il concessionario direttamente; per questo a volte il cliente è stimolato ad andare in concessionaria utilizzando messaggi che compaiono direttamente sullo schermo della macchina: esempio: “guarda sembra che tu abbia un problema alla macchina, inquadra Qr code e fissa direttamente online un appuntamento in concessionaria. In questo modo il cliente può liberamente scegliere uno slot, senza procedere con chiamate al numero di assistenza e perdere ulteriore tempo.

Interviewer

Viene fatto con ogni cliente, giusto?

Respondent

Sul circolante a 10 anni, le macchine più vecchie, io non ho queste opportunità, ce l'ho da 5 anni a questa parte, quindi con tutti i clienti no. Ovvio che qui la qualità del dato è fondamentale perché come posso raggiungere i clienti di cui non hai neanche il numero di cellulare? Qualcosa bisogna avere al fine di essere in grado di contattare un cliente. Tutti i nostri veicoli, essendo beni registrati con una targa, siamo in grado di avere nome, cognome, indirizzo. Però nell'arricchimento dei dati in fase di consegna, molti concessionari non sono così bravi e diligenti nel raccogliere tutti i dati, come per esempio il cellulare, e successivamente caricarli correttamente sui nostri sistemi; in questo caso l'errore però nasce dall'inefficienza umana, ma sicuramente la digitalizzazione in questo processo aiuta ad essere efficaci e soprattutto a ottenere dati consistenti e utili.

È proprio grazie alle innovazioni in termini di digitalizzazione che i clienti non vengono contattati con strumenti di comunicazione che rimandano all'età della pietra (come per esempio lettera cartacea nella cassetta delle lettere, che non è la cosa più efficace). Quindi qui la cosa essenziale è chiudere il cerchio e riuscire di avere dei dati importanti e ben strutturati, ricordandoci però che per esempio la nuova normativa sulla privacy ha reso un pochino più complicato questo scambio di informazioni in maniera trasparente.

Perché è vero che i dati si riescono ad ottenere e sono finalizzati a quel tipo di trattamento, ma un altro evento differito nel tempo potrebbe non essere compatibile con quella disclaimer che ha preso inizialmente; il consenso del trattamento dei dati va richiesto nel tempo ed è una complicazione che da una parte si capisce, ma dalla nostra parte, in ottica di azienda che ha come obiettivo la tutela del cliente ed alcuni processi nascono dopo il tuo consenso, noi non siamo automaticamente autorizzato a fare tutto quello che dovresti, quindi qui il limite è: Aggiornare i nostri dati nel tempo e far sì che ogni volta, per esempio, quel cliente passi in assistenza e prendiamo l'occasione per chiedere e far capire le cose nuove che stanno succedendo.

In quello appena esposto e che succede oggi, stiamo parlando di digitalizzazione che avviene adesso. La digitalizzazione con questi dati, che sta per avvenire la stiamo già testando. Faccio alcuni esempi innovativi:

- la manutenzione predittiva, cioè noi oggi da questi segnali, da questa auto connessa riceviamo 100, 150 segnali (quelli che vi ho descritto prima erano i 5 più ovvi, quelli che si accendono anche dalla spia della macchina del cliente). Cioè quando leggevo io che una spia si è accesa, il cliente l'aveva già vista. Ma io, dietro le quinte ricevo tanti segnali in più per ogni cliente, e attraverso l'accessione di un segnale A, un segnale S e un segnale D, mi viene da predire che prossima settimana potrebbe accendersi anche il segnale V. Allora io comincio a mettere insieme delle ipotesi, delle logiche di ricorrenza di segnale. In questa ottica, stiamo cominciando a sviluppare degli algoritmi che ci permettono di predire quello che succederà, quindi con dei banali segnali deboli che l'auto ci fornisce in continuazione riusciamo a dire “guarda che fra una settimana si accenderà una determinata spia “allora lì si che è sorprendente la digitalizzazione. Lì è sorprendente perché io non sto reagendo ad un bisogno, ma sto offrendo un servizio preventivo che in molti casi può anche evitare un Guasto, una rottura, o incorrere in un problema più serio. Quindi questa è la visione alla manutenzione predittiva.
- E poi, per fare questo, per esempio, noi come azienda abbiamo investito nel regalare al cliente questa connettività e quindi noi da ora l'auto connessa la prepariamo con il veicolo per dieci anni. Di solito il cliente aveva questa opzione per un tot di tempo appena riceveva il veicolo e poi rinnovare questa specie di abbonamento per dire. Adesso è incorporato nel veicolo, poiché noi pensiamo che sia talmente importante per aiutare processi del futuro. Siamo noi che abbiamo messo di sede adesso i 10 anni di auto connesso perché raccogliendo dati per molto tempo possiamo supportare il cliente, ma non solo il cliente nuovo, cioè il primo cliente, ma quell'auto diventerà un'auto usata e quindi anche il cliente dell'usato che avrà quel punto di servizi innovativi che non si aspettava. Di solito quando compri un'auto usata non hai tutto quello che avviene quando compri l'auto nuova. Questa è un'altra logica di evoluzione che nel tempo che vogliamo fare, abilitando funzioni nuove.

- Ci sono altre funzioni interessanti che stiamo introducendo e che saranno interessanti per un progetto più ampio nell'auto che si chiama FOTA (feature over the air). Quindi noi oggi siamo già in uno orizzonte di connettività. Stiamo passando da una modalità che si chiama SOTA (Software over the air) che è esattamente quello che succede nei cellulari. Ti si accende sul cellulare un'icona con la disponibilità di un aggiornamento schiacci e si aggiorna. Ecco oggi l'auto ha mediamente 60, 70 centraline ed è connessa a sistemi di bordo che si aggiornano, con dei software che vengono rilasciati in continuazione; quindi, l'auto si comporta con SOTA. Software over the Air in una modalità simile a quella che utilizza un device. Prima per fare le stesse cose bisognava sempre recarsi in concessionaria, farsi scaricare un software, quindi il cliente faceva pellegrinaggi, non dico continui perché non era così, visto che nei periodi di manutenzione cercavamo di scadenzarli, però magari un qualcosa di non perfetto rispetto alle auto di oggi. Nelle auto di oggi possiamo trovare tutto ciò. Magari esce il nuovo iPhone 15 e non parla così bene perché è nuovo, il software che hanno messo a bordo col sistema e quindi rilasciamo 1 software e la macchina si aggiorna automaticamente parlare come il cellulare. Quindi non sto parlando di tecnologia bloccante. Ti sto dicendo che possiamo essere veloci a reagire al mercato. In passato per fare una cosa del genere probabilmente dovevamo aspettare che tu facessi il tagliando e sei mesi dopo c'era il telefonino nuovo, non lo usavi bene e magari era frustrante, un'esperienza non coerente con dei clienti. Quindi Sota software over the air
- Da SOTA possiamo passare a DOTA(diagnostic over the aire), come dire, è quello che sta cominciando a raccontare. Non solo noi riusciremo ad avere i segnali dall'auto, ma potremmo fare diagnosi da remoto, quindi connettendoci all'auto da remoto. Noi siamo in condizioni di non far venire quell'auto in officina per una cosa banale che magari può essere gestita da lontano o comunque da cliente o da un nostro software. O comunque possiamo fare una pre-diagnosi per far sì che quando il cliente va in concessionaria, se c'è qualcosa di specifico non perde tempo. Arriva ed è già tutto chiaro, magari abbiamo già ordinato un ricambio, necessario per procedere. Quindi tutto questo è nell'ottica non solo di dare un servizio al cliente, ma anche di recuperare tempo. Anche perché oggi il tempo è valore, È l'elemento del modern luxury, che sto cercando di portare e rilasciare all'interno della nostra azienda. Il cliente ha bisogno di SOTA, DOTA e FOTA.
- FOTA è un'altra delle frontiere del futuro della tecnologia e della connettività dell'auto perché? Perché a quel punto noi pensiamo di rilasciare delle Feature, Feature over the air. Cioè l'auto nasce con la gran parte degli accessori: i sedili riscaldati e raffreddati, i fendinebbia, il tetto fotocromatico, tutto quello che serve. Ma tu non lo stai pagando perché hai scelto altro o comunque hai scelto due o tre di questi accessori, ma non tutti.

Poi tu però che vivi a Roma e probabilmente il volante riscaldato non ti serve, non lo hai pagato, ma vai una settimana in vacanza a Cortina a fare una settimana bianca, fa un freddo bestia e lo vuoi? La APP di Jaguar Land Rover Android te la attiva. È come se affittassi l'accessorio, la funzione. Te la compri, cioè abiliti il volante riscaldato e lo paghi magari 50 euro.

Interviewer

Come se lo noleggiassi.

Respondent

Sì, lo paghi 50 euro. Invece di 1000 come nella fase di acquisto dell'auto perché ti serve in quel momento. Il fendinebbia, per esempio, tu vivi in Sicilia non la vedrai mai la nebbia. Magari però vai a fare 1 2 settimane di lavoro al Nord Italia, ti serve perché a Febbraio è in pianura padana c'è molta nebbia e io ti faccio usare il fendinebbia come i sedili riscaldati, come quello che serve. Allora il cliente ha due vantaggi.

- Primo è che non è costretto a comprare tutto subito e magari inizia a pensare ma è fondamentale? lo uso veramente? Quando mi serve?
- Noi come azienda standardizziamo la produzione. Perché fare il sedile riscaldato, sedile raffreddato, il sedile senza niente, vuol dire cablaggi diversi, vuol dire tecnologie diverse, vuol dire fare cose diverse che ti creano obsolescenza, inefficienza. Allora noi possiamo produrre molte meno cose, ma metterci tutto. Ovvero, abbassare i nostri costi industriali e avere più valore. E l'altra cosa che bisogna dire è che quell'auto se quel cliente la userà col FOTO per due o tre cose, magari il cliente successivo che compra l'usato, il concessionario può abilitare quell'auto, può aprire delle funzioni e rendere questo usato ancora più accattivante. Quindi tu ti potrai comprare anche una macchina usata che risponderà molto di più alle tue esigenze non essendo quelle che si configurano all'inizio. Quindi diciamo che ci sono tanti elementi potenziali dove la tecnologia per il futuro potrà abilitare anche un valore residuo nel tempo di quest'auto che sarà molto più usabile. Perché avrà già tante cose in più a bordo. Si avrà un valore più ampio, tanti clienti in più.

Interviewer

E rispetto a questi aspetti innovativi, cioè il cliente, anche per quanto riguarda la gestione dei dati, per esempio della privacy, come si pone?

Respondent

Allora diciamo che quello che io ti ho raccontato in questo momento, quindi tutta questa evoluzione sotto, foto non ha impatti particolari sulla privacy, nel senso che poiché è una logica di optime, soprattutto il

fohn, sei tu cliente che con la tua app scegli cosa fare sull'auto e lo fai in totale trasparenza senza dover chiedere niente a nessuno ed entri in un modello di autogestione del dato non siamo noi. Ovvio che nella parte invece un pochino più commerciale di questo progetto si può ipotizzare che, avendo immesso sul mercato auto che hanno delle caratteristiche lasciate dormienti, sarà importante per noi stimolare magari i clienti con delle Newsletters, con delle comunicazioni, con le nostre APP nel dire “caro cliente, sappi che questa funzione che c'è sulla tua auto è particolarmente utile nei momenti estivi. Se Vai in vacanza ricordati di abilitare questa cosa qua” e quindi nella logica di poi invece costruire una comunicazione commerciale, che sia di stimolo a vendere queste cose perché noi lo facciamo per poi abilitare un canale nuovo, Di fatturazione, perché il fota a quel punto è a pagamento, e quindi può essere un vantaggio interessante. Però, come ogni cosa a pagamento, la devi un po' stimolare invece. Quindi, in questo caso è importantissimo che noi prendiamo bene all'origine e in ogni passaggio di auto i dati rilevanti nel cliente, facendogli firmare i contratti. Quindi è proprio la gestione della qualità del dato, la gestione della privacy per aumentare il valore dell'interazione col cliente è una cosa fondamentale.

Interviewer

E sempre rimanendo in tema dati, per capire effettivamente la soddisfazione di un cliente, comunque, anche le potenzialità che ci sono dietro un cliente. Quali sono le metriche e i KPIs che vengono utilizzati?

Respondent

Ma allora noi abbiamo un sistema, avendo la fortuna di rappresentare un'azienda nel settore dell'arte, questo è n qualcosa di irrealista, che può connettere il prodotto, il servizio che dà univocamente al cliente. È un bene registrato targato sa chi è, sa dove vive. Abbiamo tanti dati qualitativi del cliente. No, perché a noi, per immatricolare un'auto dobbiamo avere dalla partita IVA un'azienda, al codice fiscale tutto quello che è copia dei documenti. Cioè noi non siamo un'azienda, tra virgolette, di “fast mover”. Per esempio Louis Vuitton, ti vende una borsa super luxury ma da questa borsa il brand non è in grado di sapere di chi è, se è un regalo etc. etc..

Noi sappiamo chi è il proprietario' utilizzatore, l'utente, è quello lo intercettiamo nel tempo ogni volta che noi lo incontriamo. Soprattutto nella parte del servizio, gli mandiamo un questionario di soddisfazione, quindi abbiamo una piattaforma molto strutturata che si chiama Medaglia, che attraverso i dati che una specifica piattaforma ci aiuta a raccogliere tutte le informazioni interagendo col cliente via elettronico. Sostanzialmente non facciamo più telefonate integrative, una volta facevamo qualche telefonata. Perché magari il campione di risposta era basso, oggi l'utente mediamente è abituato a rispondere soprattutto. Oggi ormai rispondere ad un questionario è una cosa che accompagna la quotidianità. Il questionario di

soddisfazione te lo fanno pure sui prodotti da 5 €. Oggi su un veicolo da 150.000 € il cliente risponderà, come mi ha trattato concessionario se mi serve qualcosa in più che servizi mi piace?

Questo aiuta la mia relazione col brand, quindi il brand diventa credibile se riesci ad avere questo tipo di rapporto, noi dai dati che raccogliamo li elaboriamo e abbiamo proprio in dashboard con delle metriche. Le metriche primarie sono il NPS, quindi la soddisfazione del cliente; la seconda che mettiamo all'interno di questo contesto è l'intenzione di riacquisto

La missione del mio reparto nel tempo è quella di coccolare e tenere il cliente in una condizione tale che il loro stimoli alla fedeltà siano sempre attivi. Perché un cliente soddisfatto è più facile che continui a comprare da te. Oggi la nostra metrica essenziale è l'intenzione di riacquisto, è un indicatore importante, siamo al 64% che non è male, ma il mio obiettivo è arrivare almeno al 68%. Tieni conto che ogni punto percentuale che riesco a spostare in questo indicatore lo posso contare in centinaia di macchine. E quindi quell'indicatore su cui investo ha una ricaduta economica importante per la vicenda, perché è tutto fatturato, tutto profitto. Queste due macro-dimensioni ci aiutano a raccontare com'è in quel momento cliente? NPS soddisfatto, soddisfatto. Oggi NPS è di 83 che è altissimo, giustamente. L'anno fiscale scorso, quindi tutto l'anno, la media è stato. 81.

All'interno poi dei parametri ce ne sono tantissimi altri: ci sono quelli che sono i Service six. I service six sono i sei principali parametri del servizio che da una parte aiutano alla conclusione delle NPS, perché NPS è una misura unica di tante cose. E noi sappiamo che influenzando effettivamente correttamente questi sei parametri, che poi sotto hanno anche degli attori più piccolini, questi sei macro parametri riusciamo ad aumentare la soddisfazione della clientela.

Per esempio tra questi parametri c'è: repair first time (la riparazione fatta bene al primo tentativo) per me un cliente deve percepire questo come il valore più ampio di un lavoro del concessionario. No, io porto un'auto che ha un problema, mi aspetto che venga consegnata nuovamente senza errore. In alcuni casi, purtroppo, o per problematico o per diagnosi errate, o perché poi quello il problema si si ripropone, cioè fortunatamente è basso in questo momento, siamo al 93% di repair first time. Te lo leggo in una maniera diversa, perché io poi sono abbastanza coerente a quello che è la missione di mercato. 7 clienti su 100 in realtà vanno via che devono fare le riparazioni due volte, allora se cominci a mettere così, e pensi che io faccio 250.000 passaggi in officina all'anno. Stiamo parlando di 14.000 clienti che ripassano. Stiamo parlando di mille al mese che ripassano in officina due volte. Cominci a vederla in ottica diversa: 93 bravissimi. L'idea è cento, mio obiettivo lì è 100, cioè quando la macchina del mio cliente deve uscire riparata, questa esce riparata, però magari dopo una settimana deve tornare. Ecco, questo è un elemento fortemente di Disturbo del cliente quindi? Repair at first time è uno degli indicatori più importanti che impatta fortemente nella immagine del brand.

Come l'offerta di mobilità: gli offriamo un'auto di cortesia quando viene sì o no? Come è il suo percepito? Il cliente afferma "Ho ricevuto un buon servizio, hai fatto un buon lavoro e ho pagato il giusto". Oggi il nostro

Value for money è po' più basso di dove vorrei il più alto d'Europa, però siamo a 70, cioè? 30 clienti su 100 dicono che forse quello che è avvenuto è un po' caro. Però perché io faccio la domanda a tutti, non faccio la domanda solo al cliente degli ultimi sei mesi, ma la faccio a chiunque passa in officina.

Il cliente che ha una macchina usata di sei anni e l'ha comprata di seconda mano, quando poi il tagliando costa 1.000 € se hai pagato 100.000 € da due anni è banale, se quel tagliando a 1.000 € lo faccio su un'auto da 30.000 € che hai comprato usato probabilmente hai un peso diverso. Perché? Perché onestamente facendo quel tagliando al di fuori della nostra rete, andiamo ad operare materiali usati di diversa qualità, fanno sì che magari lui pagherebbe facilmente 700 €. Come li giustifichiamo? Come ce li ha in testa al cliente, perché lui non vede il vantaggio di andare in rete. Avere ricambi originali, avere del personale preparato perché purtroppo molti si concentrano sull'aspetto economico, se invece quella differenza economica la metti su tutto quello che vuol dire per noi Certificare i professionisti della nostra rete, quindi la formazione che fanno. Tieni conto che un meccanico mediamente fa 30 ore di formazione da noi all'anno. Formazione vuol dire che per fare delle ore, lui deve lasciare l'officina e venire fisicamente nelle nostre strutture. Vuol dire giorni di lavoro in cui quella persona non perduta in azienda; quindi, questa inefficienza al concessionario ha un costo che va pagato, va remunerato e da messa all'interno di quella che è la tariffa della manodopera. La tariffa della manodopera nostra è più elevata, perché la formazione, investimenti, la qualità dei materiali che noi usiamo all'interno nei nostri processi sono differenti. Allora, per garantire l'integrità di quel di quel prodotto devi sapere che pagherai di più. È noto che, per esempio, nel mondo dell'orologeria di lusso. Si parla di manutenzione ogni due anni. Se tu compri il Rolex, e lo paghi 10.000 €, dopo due anni Vai dal tuo orologiaio, e nel mondo dell'orologeria c'è molta meno differenza tra dell'esterno e l'interno della rete. E credo che se tu fai una manutenzione ordinaria, spendi 5, 600 €, il 5% del prezzo d'acquisto. Se facessi pagare il tagliando il 5% dell'acquisto su una macchina 200.000 €, ti costerebbe 5.000 €. Sono 1000 invece, allora il concetto è, non c'è correlazione e non c'è contezza molto spesso nella clientela del valore di quello che hai fatto.

Sono tranquillamente disposti a pagare 500 € per quello dell'orologio, ma allo stesso peso portato alla loro auto non lo concepiscono. Qui c'è la parte di lavoro, in merito alle cose che noi dobbiamo introdurre a livello innovativo per il trasferimento di questa cultura. Quindi, per esempio dedicare tempo quando io ti dicevo, quanto è importante il tempo liberato all'interno delle strutture? Vuol dire che liberare tempo col cliente, quindi spiegargli i lavori fatti, spiegargli la fattura, spiegargli che cosa è successo all'auto raccontare queste che ti sto raccontando. Perché io quando ho un cliente, gli racconto il paradosso dell'orologio. Lui si guarda il polso dice, hai ragione. Mi è costato niente il tagliando rispetto a ciò. È facile arrivare a commentare il luogo comune, ma la costruzione del valore, lo storytelling e tanti elementi fanno la differenza. Noi oggi dobbiamo creare questa logica empatica.

Interviewer

Ma ovviamente, cioè il fatto è che anche essendo un brand di lusso, cioè ovviamente devi utilizzare anche questa logica empatica per arrivare al cliente, quindi la domanda che ho è sì, OK, l'utilizzo dei dati, la parte che non vale dati quantitativi? Eccetera. Ma dall'altra parte ci deve essere comunque un'interazione proprio più relazionale con il cliente al fine di ottenere una relazione a lungo termine, sicuramente.

Respondent

Il tempo come ti dicevo prima. Stiamo creando delle figure, l'accettatore la figura che noi vediamo più strutturata per fare questo, che proprio usando gli effetti positivi della digitalizzazione, quindi? Processi più efficaci, ridurre tempi tecnici per fare le cose, l'online service booking. Sto contattando il cliente, ma uso piattaforma esterna per dire prenotatelo da solo, quindi non devono chiamare per aspettare che qualcuno prenoti per lui. Io lavoro semplicemente per aumentare il valore di questa relazione. Ti ricordo che la digitalizzazione a noi ha portato negli ultimi 24 mesi la riduzione dei tempi di accettazione, i tempi tecnici di accettazione, quelli che dovevi fare perché dovevi digitare i telai, scrivere 50 volte, aprire gli ordini di lavoro, tutte cose che adesso avvengono elettronicamente. Abbiamo ridotto da quasi 40, da circa 40 minuti a quasi 20. 20 minuti in meno vuol dire che quei 20 minuti dedicati al cliente, non ho chiesto all'accettatore di lavorare. Sto dicendo Reinvesti quel tempo in un'ottica diversa di qualità, Up-selling: se tu hai tempo per raccontare le cose, magari li vende un servizio perché queste "gomme mhm hai fatto 50.000 km. Forse sono da cambiare" Prima non hai tempo di farlo perché prima stavi semplicemente facendo il lavoro burocratico per aprire la pratica. Invece col cliente noi abbiamo un processo che. Si chiama EVHC Electronic Health Vehicle check, che permette all'accettatore con un tablet di girare intorno all'auto insieme al cliente e guardare quelle cose che possono stimolare anche a dire," ma qui c'è un lavoro che vogliamo riparare, qui c'è il faro che ha un'incrinatura", cosa che magari prima non vedevi neanche. Il tempo di oggi, infatti, sta un po' consumato. Come fare anche questo? Le predispongono un accessorio. "vedo che ha i tappeti usurati".

Cominci a passare del tempo di qualità per far vedere che tieni al cliente che, che tieni all'auto e che puoi creare con lui l'opportunità di avere anche un ritorno economico importante. Liberare tempo aumenta la relazione con il cliente e io credo che per un'azienda di lusso, il tempo che tu dedichi al cliente sia una condizione fondamentale

Interviewer

Certo, e per quanto riguarda il CRM invece? Quindi possiamo dividere il CRM tra una parte più strategica e una parte più analitica. Quindi volevo sapere, volevo chiedere se si poteva creare una mappa del di un Journey che viene? Sto usando appunto strumenti di CRM, quindi tu parti dall'analisi dei dati che ti vengono raccolti e successivamente decidi quale strategia adottare su un determinato specifico cliente, eh?

Respondent

In molti casi i dati si analizzano per cluster, quindi le sotto strategie le puoi attuare . Si può fare e lo facciamo. Il CRM è un progetto molto settoriale di mercato, utilizzo del CRM quindi di una piattaforma integrata di monitoraggio del dato all'interno della casa automobilistica non può prescindere da queste due macro aree di interesse: quella del marketing iniziale/ commerciale e quella della parte di servizio. Il servizio è fatto di visite ricorrenti, che aggiungono valore e danno segnali alla piattaforma. Noi abbiamo sviluppato una piattaforma in azienda che si chiama SVCRM, single view crm, che vogliamo avere con questa una visione unica. Prima i CRM tradizionali erano quello del marketing, che aveva suspect prospect e clienti, ma che si fermava nella creazione dello stimolo di mercato al fine di avere una lead generation, una base clienti più elevata. Quando poi il cliente diveniva un vero e proprio cliente, il lavoro veniva dato in mano più alla concessionaria che aveva la sua customer base e la stimolava secondo le sue logiche. Con un visione unica invece puoi osservare che hai integrato un cliente in un evento, lo hai portato a bordo, hai venduto un'auto e nel tempo hai costruito una relazione tale per cui in questo percorso di interazione con lui, non è detto che tu lo debba chiamare solo per farlo venire in officina, ma magari lo chiami a degli eventi. Nel momento giusto, grazie al CRM, stimolarlo agli acquisti (from service to sales). La visione di CRM di oggi si arricchisce di tutto quello detto prima, connected car, attività predittiva.. Tutti questi stimoli noi li carichiamo sulla piattaforma di crm e li lanciamo fuori come messaggi diretti al cliente. Quindi abbiamo anche la creatività del marketing, diciamo un po' nel reparto tutto quello che serve per governare un servizio di una piccola azienda in un'azienda, perché noi gestiamo dal marketing alla comunicazione, ai processi commerciali, alla profittabilità a 360 gradi in un'ottica più specifica dell'azienda. Il CRM è sicuramente una piattaforma estremamente interessante che arricchita con i corretti dati, ti permette nel tempo di fare operazioni specifiche e identificare magari quel gruppo di clienti cluster che hanno comportamenti simili in termini di facilità, tipologia di auto posseduta, tipologia di utilizzo, percorrenze.

Tutti coloro che sono a 10,000 km dall'uscire alla garanzia, gli mandiamo una comunicazione di venire in concessionaria--> stimoliamo un traffico che magari non ci sarebbe stato. cluster della proximity a 100,000. Piuttosto che il cluster di coloro che sono nella finestra di riacquisto, quelli che hanno fatto revisione etc. etc. Mandiamo comunicazioni e facciamo del recall. Hai quindi delle opportunità di lavorare con l'approfondimento della qualità del dato e la definizione di alcune azioni e reazioni che puoi implementare sui cluster. L'elemento più sofisticato legato proprio alla tecnologia, e innovativo è per esempio il GEOfencing, consiste nell'andare a identificare dei punti specifici nel territorio e mapparli con una "fence", barriera virtuale. Abbiamo mappato i nostri concessionari e mappiamo di conseguenza dei punti di interesse. Esempio: abbiamo mappato tutti i pet point (arca planet...), perché abbiamo degli accessori per l'auto dedicati esattamente a questo target di clienti. Noi, avendo la georeferenziazione del nostro punto di vendita riusciamo a vedere il traffico di cellulare che entra ed esce dalla sede, e tutti questi numeri ricorrenti saranno sicuramente persone della concessionaria, e li togliamo. Gli altri, ipotizziamo che siano i clienti che sono in

possesto di un'auto JLR. Gli stessi, avendo mappato alcuni punti, intercettiamo quando questi cellulari sono entrati in quei punti. Ipotizziamo che colui che è venuto da noi in concessionaria, magari è andato dentro ad un negozio di animali, oppure di sport estremi etc. etc. Quindi gli mandiamo una newsletter sul cellulare direttamente che gli dica, caro cliente “scopri la linea di accessori già per i tuoi amici animali” Quindi cominciamo ad interagire con un marketing sofisticato, lavorando con i segnali che il cliente ci dà e tracciando i suoi comportamenti. Perché proprio nella logica di valorizzare l'esperienza di possesso dell'auto, noi dobbiamo capire con quell'auto cosa può ottenere lui.

Prima il marketing si faceva comprandosi spazi e dicendo a tutti indistintamente un messaggio, non personalizzato. Noi oggi crediamo di essere riusciti a personalizzare meglio il messaggio, facendolo arrivare al destinatario. Qui è a qualità del dato, la digitalizzazione, l'interazione col nostro prodotto che ci permette di abilitare queste innovazioni commerciali.

Un'altra chicca che ti do proprio per farti capire La meditazione della tecnologia come enabler che diventa opportunità, ti raccontavo delle auto connesse; quindi, se l'auto è connessa perché c'ha delle SIM, manda a me un segnale. Una domanda, ma perché non posso io mandare un segnale all'auto? Allora lo faccio con il SOTA, però lo faccio in maniera generica, cioè nella nostra piattaforma SOTA so che ho 5000 Evoque che hanno quel software; quella versione del software obsoleta, va aggiornata, spara un sistema e tutte le macchine vengono autonomamente aggiornate. In realtà noi possiamo andare a messaggiare la singola auto e abbiamo pensato di arrivare allo schermo. Oggi per noi lo schermo dell'auto diventa un abilitatore di messaggio. Invece di mandargli un segnale generico o una campagna, io posso andare a comunicare One to One, Auto per auto al cliente stesso. e il vantaggio qui qual è? Che non ho bisogno della certificazione della privacy, perché so che è facile la comunicazione legata alla sicurezza, parlando all'auto in maniera totalmente anonima, quindi io non so se è tizio Caio che riceve il messaggio ma sto dicendo Tizio Caio che è importante che lui faccia delle cose Per la sua sicurezza.

Per esempio, quando lanciano delle campagne di richiamo quando lanciamo, in Questo momento stiamo. Facendo una campagna per consegnare le seconde chiavi ai clienti. Gli arrivano Il messaggino sullo schermo con scritto “caro cliente, la tua seconda chiave è pronta, inquadra il QR code per prenotare il passaggio in concessionaria. Quindi riusciamo e stiamo riuscendo anche per il futuro. A fare delle operazioni molto più sofisticate usando la tecnologia come abilitatore di questa relazione azienda- cliente, azienda -macchine. In questo caso noi parliamo all'auto e all'utente che la guida perché può essere a quel punto, Il secondo proprietario che io non conosco, oppure ad un privato. E io non ne ho traccia, non saprei che scrivere. Invece gli arriva. Un messaggio e. Magari in quell'occasione gli chiedo di confermare i suoi dati, poi probabilmente prendo.

Interviewer

E quindi tu ottieni il modo di avere altri dati.

Respondent

Quindi oggi noi stiamo creando un ecosistema dove dagli input e dagli output stiamo cercando di creare valore interconnesso perché più ci portiamo la qualità di dato nel tempo e più abilitiamo canali nuovi più riusciamo a far sì che quel cliente abbia una relazione significativa con noi, che non vuol dire solo fare fatturato, ma che lui viva il rapporto col brand come un rapporto che crea valore. Io credo che chi oggi compra un prodotto di lusso si aspetta un po' di essere coccolato e gestito supportato.

Se io ti dico una cosa, non te la dico perché ho un ritorno economico, ma te la dico perché ti sto dando un servizio, cioè far sì che cambiamo gran parte del percepito da logica di disturbo alla logica di servizio e supporto.

Interviewer

Certo, e a me è capitato di leggere su sul sito ufficiale Jaguar Land Rover che per esempio avete anche implementato una tecnologia di Amazon Alexa all'interno dei veicoli. Ecco, e quindi questo tipo di innovazioni fa sì che ci si avvicini sempre di più all'obiettivo di diventare leader per quanto riguarda l'utilizzo digitalizzazione nel mondo dell'automotive.

Respondent

Sicuramente sì, adesso la logica della leadership è relativa, nel senso che una leadership te la dà. Un osservatore, un cliente, non è un parametro puramente misurabile. Quindi noi quello che vogliamo fare non è tra virgolette, creare una leadership assoluta, ma lavorare su quella leadership nel rapporto col cliente che lui trovi fondante e centrale.

Quindi probabilmente Tesla, che è molto avanzata su certe cose. Ognuno può avere. Una sua, tra virgolette, leadership in un settore specifico. Noi stiamo cercando di creare un progetto invece molto più centrato con la persona no?

Interviewer

Però sicuramente questo interesse crea un vantaggio competitivo per l'azienda.

Respondent

Certo, Anche perché sono quelle cose che ti aiutano a influire su quel famoso 63 che deve diventare 68, quelle intenzioni di acquisto, cioè come faccio io a dare al cliente argomenti ancora più ampi, perché Lui si senta a suo agio con il brand, veda questo brand, questo veicolo come elemento che lo rappresenta e che quindi si affeziona in maniera tale per cui l'auto successiva è inevitabilmente un'altra gioia, un'altra macchina JLR. Perché, per esempio con il mio profilo Alexa che ho configurato dentro casa con cui faccio alcune cose, da far partire l'aspirapolvere senza fili a ad accendere, spegnere la televisione, le luci, la musica, impostare

un timer. Cioè io mentre mi avvicino a casa con Alexa posso fare alcune cose, dal mandare un messaggio, perché lei sa ricevere un messaggio e propagandolo dentro casa dicendo sto arrivando, piuttosto che ehm accendere le luci. È fighissimo, arrivare in casa e avere giù la luce accesa, ma non perché te la sei dimenticata. Ed ecco quando arrivi oppure fai partire la musica oppure la musica che ascoltavi a casa con Alexa quando esci. La continui, la stessa stazione e magari lo stesso programma nell'auto in cui. Sali continui, cioè? È quella che noi chiamiamo una seamless experience, cioè cercare di dare meno barriere possibile al cliente che si possa sentire a suo agio a casa come nell'auto. E quando c'è questa logica di vivibilità dell'esperienza. Semplice, quindi, la semplicità è fondamentale, il cliente perché deve cambiare? C'è più probabilità che cambia Land Rover, cambia la tua macchina. In quel profilo, tutte quelle configurazioni da un'auto all'altra viaggiano in automatico perché tu hai la tua APP già preconfigurato. Quindi, quando abiliti la nuova auto, tu avrai esattamente le stesse impostazioni delle tue stazioni radio preferite? E tutto quanto, ecco questo. O c'è un elemento veramente disturbante, dirompente, che ti porta a cambiare oppure è una di quelle cose che da valore. Quindi il vissuto che hai coronato, soprattutto quello positivo che vivi giorno per giorno te lo trovi in automatico. Quindi è come se tu alzi l'asticella e parti già da un punto più in alto.

Interviewer

Quindi sicuramente, rispetto a innovazioni di questo genere, anche da banalmente accessori a invece tecnologie più mirate e comunque un elemento che per il cliente non è scettico o comunque non è quasi infastidito da questo.

Respondent

no, Perché queste sono cose che si integrano col suo stile di vita. Mentre se tu avevi messo all'inizio la guida autonoma, non le tecnologie ADAS sono proprio quelle tecnologie che possono portare in un filo di distanza, scetticismo. Perché il Cliente non le vive e non le sente sue ancora. Ovviamente le prossime generazioni che nasceranno con veicoli che a bordo avranno già certe tecnologie, le danno per scontate. Come oggi succede a me che avendo un'età mi sono abituato a vivere l'auto e con le tecnologie. Cioè io nella tecnologia di una della mia auto probabilmente utilizzo il 60% di tutte le tecnologie e gli strumenti innovativi tecnologici disponibili.

Mentre invece mi rendo conto che i miei figli, Quando sono a bordo dell'auto giocano con le app, dicono "aspetta papà metto il mio" "no, mettiamo Spotify per la musica". Per me invece, Spotify non è essenziale e non lo uso. Perché per me c'è la radio, c'è il DAB, c'è alexa, se vuoi che me la sono figurata casa anche l'altro mi fa piacere, ma altre cose non le vedo Banali invece loro le danno per scontate, no? Quindi voi giovani? Date per scontate cose che nell'auto volete trovare perché? Perché fa parte del gioco.

Domani un utente che avrà l'auto che senza carburante andrà e farà tutto quello che deve fare, probabilmente avrà facilità nel conoscere che quello del valore è un processo anche di fiducia. io probabilmente a lasciare la mano dal volante non ci riuscirò per tutta la vita, anche se fra vent'anni la tecnologia dovesse essere così avanzata da permettermelo. Io avrò settant'anni, e a settant'anni, non hai quel rapporto fiduciario col mezzo che ti permette di dire mi fido e Lascio perché? Perché tutta la mia esperienza di oggi è stata tale per cui non l'ho visto come una cosa possibile. So che si fa, mi è capitato di fare alcuni test e sperimentazioni molto interessanti. Ho guidato. Milano Torino che vedrete con un'auto, con, con dei sistemi già di seconda generazione. Quindi mi faceva le curve e mi frenava dalla macchina, io non toccavo il volante e la macchina mi portava con l'impostazione di velocità e con il controllo della macchina anteriore, quindi belle cose succedono. Però ancora su quello c'è l'effetto potenziale dello scetticismo dell'utente. Mentre usare Alexa dentro l'auto non ti può portare un sentimento di scetticismo, ma ti può portare soddisfazioni sorpresa, piacere benessere ma non scetticismo.

Interviewer

Quello sì, però, cioè come è stato detto prima, la nostra generazione, banalmente cioè a entro voglio trovare Spotify, sono molto più coinvolta e la tecnologia, la domino molto meglio rispetto. Magari a una persona?

Respondent

Diciamo che nella tua aspettativa la dai per scontata, mentre io la devo cercare tu la dai per scontata. Di quello che noi mettiamo gradualmente nell'auto per far sì che sia scontato. è per quello che ti dicevo. Il progetto FOTA sarà sorprendente per come verrà usato dalle diverse generazioni. Io entro un'auto. Che potrà abilitare funzioni ulteriori. Salirò, la guiderò come è e non chiederò mai niente. Un giovane magari non so se solo la userà in un modo, se porta gli amici, magari abilita anche delle funzioni che servono anche a farsi figo con gli amici, perché a volte l'auto è status . Sono tutte logiche dove c'è anche una ampia curva di apprendimento e che noi quotidianamente testiamo per capire la stabilità e da qui la cura del dato. Le interviste dei clienti sono importantissime, perché poi dai dati che ci risponde, che ci ridà indietro il cliente, noi capiamo un stiamo andando nella direzione giusta, ovvio, i basics ci devono essere, cioè se ti porti l'auto te la devo riparare. Sempre di più, possiamo interagire col cliente chiedendogli anche quali sono le sue aspettative, cosa vuole? E queste sono le opportunità che abbiamo nel cambiare l'auto del futuro. Noi abbiamo adesso per esempio, team di ingegneri per un progetto. proprio dall'Italia stanno sviluppando questo progetto. sono già credo, 25 stanno sviluppando le nuove tecnologie adas, quindi di Guida autonoma ed assistita. Questo è molto interessante.

Interviewer

Il fatto di implementare così tanto la tecnologia all'interno di qualsiasi tipo di processo è comunque un elemento che da una parte porta un vantaggio economico, ma dall'altro ovviamente richiede investimenti e cioè tanti soldi spesi e ovviamente.

Respondent

Perché? Perché questi tanti soldi spesi, noi vediamo Due fattori, il primo è. Il corretto posizionamento sul mercato, se non lo fai sei tagliato fuori. Alcuni investimenti sono condizioni di mercato, perché devi rimanere almeno al passo con gli altri.

E in altri casi se siamo bravi e arriviamo prima di altri, o meglio di altri ad alcune tecnologie abilitanti avremmo un vantaggio competitivo. Si i tanti soldi servono in primis per stare sul mercato, bene. Poi, essendo noi dei brand che tra virgolette si vogliono distinguere, magari starci meglio di altri, in certi ambiti esempio? Se andiamo sulla mia macchina, le tre schermate di APP che io ho con quella auto le riesco a trovare su tutte le nostre auto, quindi che ne so? Il sistema eco di monitoraggio dei consumi e allora di monitorizza tutti i percorsi fatti. Come ho usato l'acceleratore? Il freno e mi dà. Suggerimenti di guida su tutte le nostre auto ma è una cosa molto interessante che può stimolare, per esempio, chi ha un focus sulle coscienze green. O chi come me, per esempio, oggi sta guidando un plug in Hybrid e quindi va in ibrido. Ibrido elettrico.

Io però poi c'ho anche una delle tecnologie innovative di Land Rover che abbiamo solo che è l'assistente al guado. Da noi c'è un app che ti permette di avere un'assistente virtuale, a far un guado di un fiume. Può guardare che la nuova Defender, sia in grado di attraversare un. Corso d'acqua di 1 m. Non è banale, Eh?

Interviewer

Ma questa è l'APP che indica al guidatore come attraversare questa particolare situazione? Da indicazioni specifiche?

Respondent

Questa è la cosa che può fare l'auto e poi la APP dice con dei sensori come è la situazione, ti aiuta per esempio a monitorare quanto è l'altezza dell'acqua, se davanti alle ruote c'è un ostacolo e se andare oltre il metro, perché se vai oltre si spegne e rimane lì. Quindi l'assistente al guado sono delle tecnologie che Landrover ha sviluppato per usare la sua leadership nel fuoristrada e portare delle soluzioni innovative a un cliente che li possa trovare interessanti, usabili o raccontabili al bar, perché forse è uno di quelli che racconta al bar nella sua unicità, perché altri mezzi non hanno motivo di sviluppare tecnologie così nel trovare il leader in alcuni. Però con tecnologie simili abbiamo sviluppato per esempio il sistema di partenza in salita su superfici particolarmente scivolose per Land Rover. Per. Esempio, l'attrazione di ogni singolo gomma con un sistema computerizzato che in una superficie cedevole ti permette di fare una ripartenza e quindi senza

dover usare l'acceleratore perché più acceleri più rimani fermo. Il sistema dosa la coppia su ogni ruota ti fa ripartire. Ti sto descrivendo a grandi linee una tecnologia che noi abbiamo primo abilitato anche sul campo. Il secondo diventa innovazione. Noi abbiamo fatto dei test di ripartenza con anche tutti i concorrenti e possiamo far vedere al cliente quelle per la sua sicurezza. Allora la tecnologia può essere Presente in maniera massiva dentro l'auto. Il problema è il tipo di utilizzo che ne fai e quanto questo poi risponde alle tue esigenze. Noi ne abbiamo messa tanta di tecnologia nelle nostre auto. Però ci sono delle tecnologie su cui investiamo che devono essere innovativi e devono raccontare una storia coerente con brand. Per esempio, per il fuoristrada noi abbiamo sviluppato una tecnologia che si chiama transparent bonnet. Il muso del veicolo, molto spesso in fuoristrada, blocca la visuale in alcune manovre estreme, soprattutto quando tu arrivi alla fine di una salita e non sai dove stai puntando.

Con alcune telecamere posizionate sotto il veicolo noi ricostruiamo la realtà che non vedo, e la ricostruisco proiettandola, quindi ti faccio vedere quello che hai davanti, come se tu non avessi il corpo, e quindi io posso fare delle manovre, non avendo normalmente percezione di dove sto mettendo le ruote, ma in questo modo, potendo farla in sicurezza, riesco a farlo. Questa è un'altra tecnologia innovativa che abbiamo presentato noi. Questo è un esempio di Come usiamo le tecnologie e diamo coerenza al posizionamento del brand per raccontare una storia compatibile con quelli che sono i tuoi valori. Noi siamo i leader del fuoristrada e cerchiamo di abilitare tecnologie che ancora di più vanno in quella direzione quelle tecnologie che in molti casi sono tecnologie usate quotidianamente. Come fanno con la Formula Uno tutte le tecnologie, molto spesso le case che corrono poi le portano alla vita normale, perché quello che sperimentano lì, che è estremo lo riescono a portare come elemento, un valore e salva. Noi facciamo la stessa cosa col fuoristrada portiamo tecnologie abilitanti alla sicurezza stradale, abilitanti al vissuto del veicolo e quindi, per esempio con tutte queste tecnologie che abbiamo e usiamo, I sensori e le telecamere che noi abbiamo dalle APP, per esempio che ti permettono di fare la manovra di aggancio di un furgone, di un carrello o di un carro o di un gommone da dentro l'auto con diagnosi auto. È innovativa perché, per esempio. Il gancio di traino, Scende con tutta l'auto. Facciamo la manovra, poi rialziamo l'auto nel punto giusto e c'è un sistema che permette di vedere da dentro esattamente quando il perno del gancio si posiziona e io riesco a fare la manovra e agganciare il gancio al centro senza scendere dall'auto, cosa che di solito si. Metteva con 2 3 Persone. Ti aggancio a quindi. Noi stiamo provando a semplificare la vita all'utente.

Interviewer

Concludendo come ultima domanda volevo sapere quali sono le aree all'interno dell'azienda con cui vi relazionate di più in termini di condivisione dei dati, cioè tutti i dati che prendete?

Respondent

Noi mediamente. Ci relazioniamo con tutte le aree aziendali. Perché essendo noi un reparto votato al servizio, prendiamo i segnali da tutti. Quindi abbiamo, diciamo con utenti privilegiati, i colleghi del commerciale perché siamo i due piatti della bilancia. E abbiamo come ulteriore spunto tutta la parte finanziaria, quindi la finanza che diventa Altro elemento, supporto abilitante per alcune delle nostre attività. E poi, ovviamente interagiamo anche con un'area specifica di marketing all'interno del reparto. Ok, quindi diciamo che abbiamo sicuramente tante belle cose da condividere.

Interviewer

Per me possiamo concludere, anzi grazie per la disponibilità.

Appendix B

Coding for the Data analysis using Gioia methodology.

Quotes	First-order Concepts	Second-Order Concepts	Aggregate dimensions
<p>With this digital evolution, we can, for example, support our customer relationship. And when a warning light is on, we see it; we can call the customer directly."</p> <p>"For instance, for every 5 signals we receive, we send structured communications to the customer."</p> <p>"Perhaps I recognized it from the navigations I've done, I've delved into news seen on the Land Rover club app, and I made only the news of his interest appear, for example. And he feels more pampered, thus getting closer, falling more and more in love with the brand. Why? If the brand manages to excel in..."</p> <p>"Department responsible for managing customer relationships," "when the car is sold and then delivered to the customer, we step in. From there on, it's a relationship that helps us follow and assist them."</p> <p>"Over time, the mission of my department is to nurture and keep the customer in a condition where their incentives for loyalty are always active."</p> <p>"It's increasingly essential to personalize relationships. It's evident that communication also has a significant role in this matter."</p> <p>"Luxury brands operate in a highly competitive and discerning market where customers expect nothing less than exceptional treatment and tailored experiences"</p> <p>"Luxury brands often have rich histories and narratives. Personalized experiences provide opportunities to weave these stories into customers' journeys, making the..."</p> <p>"digitalization plays a crucial role, enabling efficiency and facilitating the acquisition of consistent and valuable data", "Thanks to the innovations in digitalization, customers are not contacted using communication tools that harken back to the Stone Age."</p> <p>"The essential aspect is obtaining important and well-structured data through the full exploitation of digitalization."</p> <p>"Additionally, I can track how each online banner performs in terms of impressions, etc. This not only enhances effectiveness by comparing individual players, possibly with specific placements, and so on, but also lets you see how much traffic you're obtaining."</p> <p>"The new privacy regulations have made this information exchange a bit more complicated."</p> <p>"Obtaining consent for data processing needs to be requested over time, and while it's a complication that is understandable on one hand, from our perspective as a company aiming to protect the customer, some processes arise after your consent"</p> <p>"Of course, data quality is crucial here, because how can I reach customers whose phone numbers I don't even have?"</p> <p>"Many dealerships are not as skilled and diligent in collecting all the data, such as mobile phone numbers, and then correctly uploading them into our systems; in this case, the error stems from human inefficiency."</p> <p>"Today, time is valuable. It's the element of modern luxury. It is important to dedicate time to the customer. Allocating time to the customer means explaining the work done when their car has been repaired, going over the invoice... Building value, storytelling, and many elements make the difference. Today, we must create this empathic logic, essential for a brand that ranks in the world of..."</p> <p>"Nevertheless, we can perform a pre-diagnosis to ensure that when the customer visits the dealership, they don't waste time if there's a specific issue."</p> <p>"Scan the QR code and directly schedule an appointment online at the..."</p> <p>"Especially because today, time is valuable. It's the element of modern luxury."</p> <p>"So, all of this is in the perspective of not only providing a service to the customer but also reclaiming time."</p> <p>"In this case, it's extremely important for us to accurately capture and document relevant customer data right from the beginning and at every step of the car's journey, including having them sign contracts."</p> <p>"Managing data quality and ensuring privacy throughout are crucial to enhancing the value of customer interactions."</p> <p>"But that car will become a used car, and therefore even the used car customer will have that point of innovative services they didn't expect."</p> <p>"Usually, when you buy a used car, you don't have everything that comes with buying a new car. This is another logical evolution that we want to achieve over time, enabling new functions."</p> <p>"It remains important nowadays to be able to understand who the suitable customer is to whom to offer this type of service. In fact, not all customers are agreeable when it comes to buying a used car. It is necessary to identify the correct target and, thanks to the ongoing digital evolution, it's possible to offer an innovative and unexpected experience to a customer who is purchasing a used..."</p> <p>"For the next customer who buys the used vehicle, the dealer can enable that car, activate certain features, and make this used car even more appealing. So, you could end up purchasing a used car that aligns much better with your needs, beyond what was configured initially."</p> <p>"Online platforms allow dealerships and individuals to create comprehensive listings for each used car they have available"</p> <p>"digitalization has transformed the way used cars are presented to potential buyers through online platforms. The combination of detailed information, high-quality photos, virtual tours, and interactive features offers a comprehensive and convenient way for buyers to explore, compare, and evaluate vehicles from the comfort of their homes."</p>	<p>consistently support the customer relationship with digitalization</p> <p>building loyalty</p> <p>importance of personalize the relationship for a luxury brand</p>	<p>digital evolution at the support of customer relationship</p>	
<p>"The new privacy regulations have made this information exchange a bit more complicated."</p> <p>"Obtaining consent for data processing needs to be requested over time, and while it's a complication that is understandable on one hand, from our perspective as a company aiming to protect the customer, some processes arise after your consent"</p> <p>"Of course, data quality is crucial here, because how can I reach customers whose phone numbers I don't even have?"</p> <p>"Many dealerships are not as skilled and diligent in collecting all the data, such as mobile phone numbers, and then correctly uploading them into our systems; in this case, the error stems from human inefficiency."</p>	<p>advantages of digitalization in acquiring accurate and innovative data</p> <p>privacy issues in data exchange</p> <p>data collection and human error</p>	<p>collecting data with digitalization</p>	<p>savings advantages</p>
<p>"Today, time is valuable. It's the element of modern luxury. It is important to dedicate time to the customer. Allocating time to the customer means explaining the work done when their car has been repaired, going over the invoice... Building value, storytelling, and many elements make the difference. Today, we must create this empathic logic, essential for a brand that ranks in the world of..."</p> <p>"Nevertheless, we can perform a pre-diagnosis to ensure that when the customer visits the dealership, they don't waste time if there's a specific issue."</p> <p>"Scan the QR code and directly schedule an appointment online at the..."</p> <p>"Especially because today, time is valuable. It's the element of modern luxury."</p> <p>"So, all of this is in the perspective of not only providing a service to the customer but also reclaiming time."</p> <p>"In this case, it's extremely important for us to accurately capture and document relevant customer data right from the beginning and at every step of the car's journey, including having them sign contracts."</p> <p>"Managing data quality and ensuring privacy throughout are crucial to enhancing the value of customer interactions."</p>	<p>dedicating time to customer on site</p> <p>time savings solutions</p> <p>guarantee time-consistency in modern luxury</p>	<p>optimize time management</p>	
<p>"But that car will become a used car, and therefore even the used car customer will have that point of innovative services they didn't expect."</p> <p>"Usually, when you buy a used car, you don't have everything that comes with buying a new car. This is another logical evolution that we want to achieve over time, enabling new functions."</p> <p>"It remains important nowadays to be able to understand who the suitable customer is to whom to offer this type of service. In fact, not all customers are agreeable when it comes to buying a used car. It is necessary to identify the correct target and, thanks to the ongoing digital evolution, it's possible to offer an innovative and unexpected experience to a customer who is purchasing a used..."</p> <p>"For the next customer who buys the used vehicle, the dealer can enable that car, activate certain features, and make this used car even more appealing. So, you could end up purchasing a used car that aligns much better with your needs, beyond what was configured initially."</p> <p>"Online platforms allow dealerships and individuals to create comprehensive listings for each used car they have available"</p> <p>"digitalization has transformed the way used cars are presented to potential buyers through online platforms. The combination of detailed information, high-quality photos, virtual tours, and interactive features offers a comprehensive and convenient way for buyers to explore, compare, and evaluate vehicles from the comfort of their homes."</p>	<p>innovative services provided to used car customers</p> <p>retailing used cars</p>	<p>new logical evolution towards used cars.</p>	
<p>"Perhaps there wasn't just a technical component to solve, but there's also a driving style that isn't consistent with what was purchased. Some of the communications are educational in nature."</p> <p>"There are things that the dealership must handle directly."</p> <p>"Sometimes, the customer is encouraged to visit the dealership using messages that appear directly on the car's screen."</p> <p>"We have the connected car, so the vehicle is equipped with built-in SIM cards, and through these SIM cards, we monitor many car parameters. Even before they appear on the car's interface, we start receiving these signals remotely, and we receive all of them in parallel"</p> <p>"We are in a position to avoid bringing that car to the dealer for a minor issue that can possibly be managed remotely."</p> <p>"But we could perform remote diagnostics, connecting to the car remotely through the development of DOTA MODE, which stands for Diagnostic Over The Air. This means being able to remotely diagnose the vehicle, understand what's working and what's not, creating an entirely new mode of remote interaction. Consequently, we're capable of addressing certain issues without necessarily requiring the customer to bring the car into the workshop."</p> <p>"In the slightly more commercial aspect of this project, we could envision that, by introducing vehicles to the market with dormant features, it will be crucial for us to engage customers through newsletters, communications, and our apps, conveying messages like, 'Dear customer, be informed that this feature in your car is particularly useful during the summer months.'"</p> <p>"Transitioning from a mode called SOTA (Software over the air), which is exactly what happens with cell phones. An update icon appears on your phone, you tap it, and it updates."</p> <p>"Today, the car has an average of 60 to 70 control units and is connected to onboard systems that update continuously with software releases. Therefore, the car behaves with SOTA."</p> <p>"So, we release software, and the car updates automatically to achieve the same configuration as the newly released iPhone."</p> <p>"Previously, to accomplish the same tasks, you always had to visit the dealership, have software installed manually. So, customers undertook these journeys—maybe not continuous, as we tried to schedule them during maintenance periods, but still, it might not have been as seamless as today's cars offer. In today's cars, we can find all of this."</p> <p>"So, I'm not talking about technology that's restrictive. I'm telling you that we can react quickly to today's market with these systems."</p> <p>"Digitalization is a fundamental element for us because it becomes an enabler of many strategies. It is certainly a catalyst for future processes that are not yet even tangible in the market today."</p> <p>"In the past, for something like this, we probably had to wait for your scheduled maintenance, and six months later, there was a new cell phone, but your car's settings weren't updated like the phone's. This could be frustrating for the end customer."</p>	<p>re-educating the user through remote communication</p> <p>incentive to visit the dealership through remote messages</p> <p>the ability to monitor all car parameters remotely</p> <p>DOTA mode (diagnostic over the air)- Remote diagnostics</p> <p>encouraging customers to activate dormant features.</p> <p>SOTA mode (software over the air)- today the is car perceived as a mobile phone</p> <p>comparison between today and yesterday</p> <p>yesterday vs today in the car update experience</p>	<p>remote communication</p>	<p>the future is controlled remotely</p>

<p>Modalità FOTA (Feature over the air) "Because at that point, we are considering releasing Features, Features over the air. The car is initially equipped with most of the accessories: heated and ventilated seats, fog lights, panoramic roof, everything you need. But you're not paying for it because you chose something else or maybe you chose two or three of these accessories, but not all of them."</p> <p>"For instance, if you live in Rome, you probably don't need a heated steering wheel and you didn't pay for it, but if you go for a week-long skiing holiday in Cortina, it's freezing cold and you want it? The Jaguar Land Rover Android app can activate it for you."</p> <p>"Firstly, the customer isn't forced to buy everything immediately, and perhaps starts to think, 'Is it essential?' They can decide to apply it later based on their needs."</p> <p>"As a company, we've standardized production."</p> <p>"So, we can produce far fewer things, but include everything. In other words, reduce our manufacturing costs and deliver more value."</p> <p>"You, as a customer, use your app to choose what to do with the car, and you do it completely transparently without having to ask anyone. You enter a self-</p> <p>"So, technology can be massively present inside the car. The issue is the manner in which you use it and how well it meets your needs."</p> <p>"There are technologies that we invest in, which need to be innovative and tell a story consistent with the brand."</p> <p>"We are the leaders in off-road vehicles, and we strive to enable technologies that further align with that direction. These technologies often include features used on a daily basis."</p>	<p>multiple features for every need</p> <p>benefits for consumer and firm</p> <p>the technology extensively integrated into the car</p>	<p>adaptation to future customer's necessities</p>	
<p>"Where experience is everything, it means easy navigation, it means simplification of all touchpoints, it means speed, always, because nonetheless our customers..."</p> <p>"So, as time goes on, experience becomes increasingly important."</p> <p>"We've created entirely empty rooms where the customer has the opportunity to see various color schemes projected on the walls and to concretely experience the available textures for the interior seats... This way, the experience is complete, projecting the actual end product into the consumer's mind, with the added opportunity to try and touch the materials."</p> <p>"In the world of luxury, customers are drawn closer to a specific brand more than others when a significant amount of personalization is done. In fact, in the world of fashion and jewelry, for instance, personalization goes over the top to ensure the customer's satisfaction."</p> <p>"The simpler, the more direct the process, the better it works."</p> <p>"In an ideal world, if I've already been recognized online, the moment I walk into the dealership and provide my name, my dealer already knows everything. I don't need to repeat anything. I don't have to reiterate my preferred models, nor my purchasing preferences, for instance."</p> <p>Because a luxury brand, just like a luxury customer, has the need—especially the customer—to be recognized. They want to feel acknowledged. You shouldn't have to ask them again for their name, surname, or address. For example, if you want to invite them to an event, etc. Right? Feeling like a part of the brand, feeling like a customer above others, is a fundamental requirement."</p> <p>"With a luxury brand, a chatbot is less significant. In fact, we've always had a personal chat service with individuals who respond."</p> <p>"It's possible to track the entire customer journey, using the online configurator, requesting an online quote, and so on."</p> <p>"Thanks to digitalization, the customer journey has been enhanced, providing more convenient options and interactions."</p>	<p>importance of the experience for a luxury firm</p> <p>simplicity wins</p> <p>guarantee ad-hoc service</p> <p>improvement of customer journey</p>	<p>seamless customer experience</p>	
<p>"I'll also add that lately, we've been incorporating additional tools that are a bit less quantitative, unlike most of the ones I mentioned earlier, but more qualitative in nature. These tools precisely measure, for example, the usage of digital properties on desktops using a spectrum of colors. This helps you understand the most clicked areas on a page and what they enable you to do. You can even track mouse movements from one CTA to another. These are targeted approaches for qualitative monitoring of visits."</p> <p>"This allows you to understand, for instance, if there was a CTA that was effective but not placed on the first screen; it was situated below. You can then bring it up higher."</p> <p>"One tool that helps, for instance, to identify and monitor movement within a specific area, the activities a user engages in, or the activities a user visits after or before interacting with us is Geofencing. It involves delving into data quality and defining certain actions and reactions that you can implement on clusters. The most sophisticated and innovative element, tied closely to technology, is Geofencing. It entails pinpointing specific points within an area and mapping them with a virtual 'fence', a barrier. We've mapped our dealerships and consequently map points of interest. For example, we've mapped all the pet points (like Atca Planet...) because we have accessories for cars precisely targeting this customer group. With the georeferencing of our sales points, we can observe mobile traffic entering and exiting the premises."</p> <p>"For instance, I recognize the most intimate interests like sports, hobbies, etc. But do I actually recognize a customer's interest even in the brand's Heritage events? Well, that's not a recognized interest. I mean, it's an interest the customer has, and even if I haven't recognized it under the name 'Mario Rossi,' I know that he's passionate about Jaguar or Land Rover gatherings. For him, it's a significant source of pride and an avenue for getting closer to the brand and surpassing the competition."</p> <p>"We send him a satisfaction questionnaire, so we have a highly structured platform called Medallia, which helps us collect all the information by interacting with the customer electronically through specific data collection tools."</p> <p>"We no longer conduct follow-up phone calls."</p>	<p>measuring digital properties on the desktop</p> <p>tracking a user's movements with Geofencing</p> <p>digital platform for measuring customer satisfaction.</p>	<p>usage of digital tools</p>	<p>The Synergy of Digital Tools and Seamless Experiences</p>

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SUMMARY

The contemporary world is undergoing a relentless transformation, characterized by the rapid evolution of innovations over the past two decades. These innovations have introduced novel ideas and knowledge, reshaping various facets of our lives. Within this dynamic landscape, digitalization plays a pivotal role, offering a multitude of tools and resources that enhance and simplify various aspects of our existence. Digitalization has become synonymous with the digital era and has given rise to a distinct generation known as Generation Z, who have grown up in a world profoundly immersed in digital technologies. For them, the boundaries between online and offline realms, as well as between the physical and the virtual, have become increasingly blurred (Meret, 2018).

It's important to distinguish between digitization and digitalization. Digitization involves the conversion of analog information into digital format, such as scanning a photograph. On the other hand, digitalization refers to the use of digital technologies and data to enhance business processes, create revenue, and improve internal operations. Differentiating how business communicates with clients and partners, modifying internal operations and developing new distribution channel opportunities in terms of sustainability are some examples of how digital applications can be implemented to all the actors involved in the life of an organization (Averina & Barkalov, 2021). The application of technology and digital tools aims at directly changing the business model, defined as the business strategy developed by each company in order to create and establish value for both stakeholders and the business itself (Bouwman et al., 2017).

The contemporary digital transformation, often referred to as the Third Industrial Revolution, is distinguished by its "information-centric" nature and is traced back to the latter half of the 20th century. It marks the integration of diverse technological advancements, leading to rapid developments and the adoption of new trends that have significantly reshaped traditional lifestyles and business practices. A prime example is the influence of Artificial Intelligence (AI) in industries such as automotive manufacturing, where AI technologies have revolutionized efficiency throughout the product life cycle (Antoniali et al., 2022).

Enterprises face unrelenting pressure to implement digital technologies in order to rejuvenate and revolutionize their business models, as observed by Kohli and Melville (2019). The integration of digital tools and technological processes unquestionably yields numerous advantages for an organization's performance and fundamental operations. In today's society, companies wield a potent tool in the form of digitalization. Evidently, the digital realm possesses the inherent capacity to be molded and customized to suit a vast array of heterogeneous contexts and objectives. Its adaptability enables it to assume entirely new connotations, contingent upon the unique requirements of the business.

The luxury car industry is a niche within the automotive sector, focusing on high-end, high-performance vehicles. It is important to highlight that "In the automotive industry, the "premium" designation is subject to multiple interpretations—not least because the very concept has evolved. The premium segment sits between

mass-market vehicles (commoditized, entry-level, valuedriven cars) and luxury vehicles (the top end of performance and craftsmanship) (Köstring, et al., 2019). The research relies on the interpretation of premium mobility as luxury vehicles that perfectly represent characteristics such as performance and craftsmanship. The demand for luxury cars is driven by factors such as rising disposable incomes, urbanization, and a growing preference for luxury and comfort. A report forecasting global consumption of personal luxury goods published by Altagamma (2022) highlights the need for luxury brands to enhance their uniqueness and address challenges through direct investments in areas like technology and data to remain competitive in the lead-up to 2030. In recent years, the automotive market, particularly in the luxury goods segment, has experienced substantial growth, especially in emerging economies such as China, India, and Brazil. The rapid growth of the Chinese population, coupled with China's trajectory to become the largest global luxury market, is one of the four major growth trends projected for 2025 (Deloitte, 2021). However, thriving in this dynamic landscape poses challenges for manufacturing industries, especially in the automotive sector. Achieving and delivering superior quality to the discerning luxury car customer remains a paramount challenge, particularly in the face of resource constraints in the product lifecycle and cost pressures. While the luxury industry has evolved to offer more accessible high-end products, the significance of wealth-based perspectives remains integral to its allure (Wang, 2022). Luxury brands must strike a delicate balance, incorporating innovation and digitalization into the customer journey while preserving the essential ingredients of brand heritage and authenticity that define luxury goods. Exploring the motivations behind luxury car purchases, two primary drivers come to the fore: personal-oriented and social-oriented motivations. Personal-oriented motivation is characterized by internal factors, where individuals seek luxury cars for enhanced comfort and a sophisticated driving experience. This motivation centers on the hedonic pleasure derived from the product, driven by individual standards. In contrast, social-oriented motivation revolves around external factors, with individuals aiming to impress others by showcasing their wealth, status, and membership in a reference group. The consumer's behavior in the luxury car market is intrinsically tied to the emotional sphere, primarily because all competitive brands in this market possess a rich brand heritage. Making some references about the aforementioned considerations, a relevant element highlighted is that automotive sector is emerging now as a follower of technology and digital applications. Only the well-capitalized players are able to dominate the automotive sector, while the traditional automakers struggle to survive, and if fail to expeditiously alter their disposition towards digitalization, their demise shall be inevitable. Analyzing the disruptive revolution occurring in the automotive luxury industry is particularly useful to understand the emerging trends in terms of digitalization and how they are radically changing the definition of this specific sector in the next future. Key trends include electrification, connectivity, shared mobility, and servitization, collectively referred to as C.A.S.E.S. (Connectivity, Autonomous driving, Shared-mobility, Electrification, and Servitization). These macro-trends impose a profound rethinking of the concept of "car" itself. There is a need to redesign not only the logic of purchase and use of the vehicles themselves by the end-user, but the very business models of the different

players in the market. Electrification and connectivity have a dominant position in the automotive landscape as they are strictly closed to issues such as sustainability and innovation. In 2022, electric vehicles represented only 1.5% of the total European car market, but by 2035 the share is expected to reach 130 million vehicles (Il Sole 24 Ore, 2022). In a future perspective, the car must be conceived as an element in which the green aspect and the smart aspect co-exist, meaning that implementing sophisticated digital technologies emphasizes the benefits of environmental sustainability. Connectivity is the adoption of technology 4.0 realized with tools such as Artificial Intelligence, satellite connection, and Internet-of-Things. Vehicles that are connected share a variety of data properties from several sensors, delivering comprehensive information on the vehicle and its surroundings. Understanding traffic patterns, driving behavior, and other relevant insights is made possible by automotive data from connected automobiles. Technological progress applied to the sector achieves a twofold objective; on the one hand it optimizes vehicle performance, with advanced sensors and monitoring systems, and on the other hand, it enhances the customer experience, making the customer journey smoother. In a world where competition is increasingly high and the offer from brands increases more and more, the value of the car as a durable consumer good can be re-interpreted; the term servitization refers to all those emerging B2C solutions that are able to offer the customer an ecosystem of ad-hoc services. These include leasing, long-term rental or pay-per use services. They are all commercial techniques that allow the customer to access and try different models of the same brand, or even different brands of the same. In 2022, 62% of Italians were willing to pay a higher premium price than traditional leasing to be able to try different models of the same brand over time (Deloitte, 2022). Like sharing mobility, the spread of this latest trend also emphasizes that the vehicle is moving towards a more flexible concept of use, which adapts according to specific habits and needs. In analyzing the future dynamics within this sector, it is important to distinct the two the main actors: the Original Equipment Manufacturer (OEM) and the dealers. OEMs must continue to invest in R&D, design and product innovation projects to maintain market positioning and competitiveness. All this translates into the introduction of new business models or the adoption of new operating models and the development of new skills in the management of the customer base (e.g., enhancement of big-data and information from the customer journey; maintenance of the loyalty also in after-sales services; creation of front-end platforms that allow users to configure, customize and order the car that best suits their needs). A close connection with the network of dealers will be necessary to integrate information systems and real-time data in a lower invasive manner, in order to stay up to date in customer service processes as much as possible. If on one hand is important to guarantee efficiency in the provision of the service by dealers, on the other hand it is equally relevant to maintain a correct evaluation of all processes in the supply-chain, adopting an agile and flexible model, capable of adapting to the most unexpected events. The second main actor is the dealer: he will have to develop and evolve his role through new ways of selling and assisting customers; In this case the phenomenon of "servitization" is the most significant trend in economic terms for their business model. A high profit margin will be guaranteed by investing in resources training to manage the complexities in the assistance

process and in the provision of accessories services. For this reason, an omni-channel strategy with e-commerce services and digital touchpoints must be a prerogative to maintain brand loyalty and at the same time succeed in embracing new customers. The customer experience must be emphasized through the use of sensory elements, thanks to AI and VR, and trust in the dealer who will be able to customize the product and the experience itself at 360 degrees. The dealer must be able to return a customer journey as smooth and flexible as possible. Finally, within this dynamic and constantly changing sector aside the actors mentioned, we find the role of suppliers. In particular, suppliers play a very important role in the analysis of phenomena such as electrification and connectivity, cornerstones of automotive 4.0. The primary objective to keep in mind for suppliers will be to create added value through software components and digital features, with a view to changing their business model. There will therefore be several strategic choices to be implemented, such as maintaining the focus on the most profitable core activities, separating the business areas that require greater transformation. In other words, suppliers will have to devote a large part of their investments to the most emerging market areas that will also be the most profitable in the future, and in some cases go to restructure the business with the help of third parties.

Integrating digital and technical advancements in internal operations is widely considered an effective approach for automotive firms to achieve efficiency, effectiveness, and competitiveness (Paolucci et al., 2021). In the area of the supply chain, which encompasses the full range of operations within most automotive firms, digital technologies serve as a fundamental platform for conducting business (Balakrishnan, 2021). Pfohl and others (2015) found fundamental contributions in the content of supply chain, and lately other academic researchers (Kern & Wolff, 2019) selected the particularly relevant ones for the digital transformation of the supply chain with a high practical relevance to the automotive: Internet of Things, Big Data and smart technologies. There are studies such as those by Hu & Basiglio (2023) and Payne & Frow (2006) that focused on the fact that automotive companies can leverage big data and analytics. They defined Customer Relationship Management (CRM) as a strategic tool recognized to enhance shareholder value and capable of offering various advantages, including increased customer engagement, innovation, and customer loyalty. Other academic studies (Vanderbilt, 2012; Hanelt et al. 2015) shifted the analysis of automotive sector to digital platforms, giving rise to a new concept of the car. Already in 2004 (Lusch) the researchers started analyzing the mobility shifting from a product-centric approach, where the focus was primarily on the car itself, to a service-oriented model where the car serves as an enabler for delivering various services. In today's environment of a knowledge-based economy, one of the biggest challenges for companies is to quantify concretely the relevance and the economic value of the information generated and managed from the customer base (Lamela-Orcasitas & Garcia-Madariaga, 2023). Customer relationship management (CRM) refers to the strategic approach aimed at improving the value of a business through the development of appropriate interactions with key customers and building a long-lasting customer's loyalty (Tigari, 2018). CRM has

become increasingly important in today's digital age as businesses seek to engage with customers across various channels and touchpoints (Saini, Sharma & Loyal, 2020). These insights can then be used to develop personalized marketing campaigns and provide tailored goods and services, enhancing customer experience and fostering loyalty (Bleier et al., 2018). It is fundamental to analyze the considerations offered by the literature concerning the psychological and behavioral mechanisms that emerge when digitalization is employed as a means to enhance brand loyalty and customer experience (Donio et al., 2006; Saritas & Penez, 2017). These resources provide valuable insights into the psychological and behavioral processes that individuals undergo when digital interventions are introduced, ultimately impacting their level of brand loyalty and overall customer experience.

A significant starting point in the literature has been presented by Rodrigues and others (2023) who began their research by positing that establishing a strong bond between consumers and brands is a crucial determinant of success, and car brands are not an exception. Furthermore, they claimed that a strong association between brand love and behavioral intentions indicates a higher propensity for consumers to engage in digital channel interactions, such as participating in online questionnaires and post-sales research. Therefore, from this standpoint, integrating digitalization into areas like customer relationship management presents an opportunity to foster brand loyalty and engage with customers who are more inclined to develop a robust relationship with the brand (Zhang et al., 2016). Car buyers are likely to possess a substantial amount of information, necessitating dealers to effectively incorporate this information through personalized interactions. This enables the nurturing of key aspects associated with the purchase process specific to the targeted individual, who possesses distinct personal and social attributes. This provides that for every seller, regardless of the context and the product, is pivotal to have a deep knowledge of the type of potential buyer in order to set an array of communication means able to foster, at the same time, information provision and collection (Hermann et al., 2007). The ideal process is to leverage available information to gather more, and use data collection, analysis and management systems to get the most out of your customer interaction (Giacosa et al., 2022). Furthermore, Giacosa (2022) highlighted the importance of the interconnection between agility and digital transformation; indeed, embracing a digital mindset, implementing a flexible and agile company structure, and developing comprehensive digital skills is the key to effectively drive digital transformation. More authors such as Zhou (2018) and Huang (2021) supported and emphasised a crucial perspective concerning customer data: in times of turbulence, the survival and prosperity of organizations can be facilitated through customer agility, which relies on real-time monitoring of customer data. In contrast to the initial perception of the internet as a platform primarily for seeking bargains, it is now increasingly recognized as a space that enables improved service provision and the cultivation of stronger consumer relationships (Thaichon et al., 2012; Batat 2022). When a company is capable of exploit the flow of information to really understand which are the successful strategies and which are the customers 'needs, in fact, the management of customer data creates economic value for the business (Harrigan et al., 2020). CRM in the

automotive sector employs various strategies and technologies to effectively manage interactions with existing and potential customers throughout their lifecycles (Malik,2015). Automotive businesses implementing CRM systems can access vital customer data to gain an in-depth knowledge of customer preferences, behaviours and unique requirements (Anshari et al., 2019).

The literature underscores the significance of data collection and mining in Customer Relationship Management (CRM) for competitive advantage (Xu & Qiu, 2008; Ranjan & Bhatnagar, 2008). However, rapid technological advancements have raised privacy concerns as data is used in new ways (Kumar et al., 2018; Acquisti, Taylor, & Wagman, 2016). Consumers' privacy protection behavior is influenced by their awareness of privacy concerns. They can adopt reactive strategies by rectifying their digital footprint or withholding information when requested. Proactive strategies involve exercising restraint and shaping ongoing information practices (Quach et al., 2022; Martin & Murphy, 2017; Lwin et al., 2007). Firms can respond reactively by complying with privacy regulations or proactively by engaging in privacy innovation. Proactive responses involve accountable business practices and partnering in data governance to create a secure ecosystem, addressing both consumer and regulatory concerns (Luo, 2006; Merrick & Ryan, 2019; Martin et al., 2020). While digital applications in the automotive sector offer advantages, they also pose security and privacy challenges. Vehicle security has gained attention due to demonstrated attacks targeting modern vehicles, highlighting the need for comprehensive security measures (Den Hartog & Zannone, 2018; Miller & Valasek, 2015).

The automotive industry's supply chain management has undergone a digital revolution, achieving new heights of efficiency, transparency, and cost-effectiveness (Klaus & Gorgas, 2019). Blockchain is a remarkable technology that is altering supply chain management (Saberli et al., 2019). The use of blockchain in supply chain management has made it possible to track goods and transactions securely and transparently (Gerschewski & Klingholz, 2017). Patel (2017) asserted that blockchain technology holds the potential to revolutionize numerous financial and non-financial sectors. Nevertheless, its widespread adoption is likely to encounter challenges in the areas of security, legal frameworks, regulations, and technological advancements (Wang et al., 2019).

Big Data is another piece of technology that has revolutionized supply chain management (Aryal et al., 2020). The utilization of Big Data, including data sourced from social media and networking applications, is prevalent in the realms of business and marketing. Hazen and other authors (2014) have analyzed the impact of Big data on data Quality, highlighting the fact that it is crucial to monitor and control the quality of data in supply chain processes, otherwise the system risks to be compromised. Generally, there are several advantages to integrating digital technology into supply chain management, including lower costs, more efficiency, and enhanced transparency (Dutta et al., 2020). For instance, suppliers can now follow the flow of parts and components

from the supplier to the manufacturer thanks to radio frequency identification (RFID) tags (Klaus & Gorgas, 2019). Manufacturers may improve their manufacturing processes' precision, efficiency, and consistency by using robots and automation (Saini, Sharma & Loyal, 2020). Trust is a fundamental requirement in human-technology interactions, particularly as artificial intelligence (AI) becomes increasingly prominent in our lives and in industrial settings. Establishing trust between humans and autonomous intelligent agents is crucial (Kessler et al., 2017). New technologies are more trusted when they function reliably and safely, mirroring our expectations of human behavior (Deley & Dubois, 2020). Contextualized research, considering the cultural environment in which technology is adopted, is vital for understanding trust in AI and AI-powered robotics (Yahya et al., 2019). Trust in AI applications often hinges on two interconnected dimensions: reliability and safety (Emaminejad & Arkhavian, 2022). Safe interactions with robots enhance their reliability and trustworthiness (Murashov et al., 2016), but excessive reliability can lead to overreliance and complacency when robots occasionally behave unsafely (Emaminejad & Arkhavian, 2022).

In this digital era, the automotive industry's multi-stage sales structure is expected to shift toward online platforms, offering a variety of brands. Customer experience management has become vital in adapting to digitalization (Bowden et al., 2021). Empirical evidence supports the notion that digital channels are effectively enabling customers to engage in purchasing decisions by providing means for searching, evaluating, recommending, influencing others, and providing feedback on products and services (Pires et al., 2022). The customer experience in the purchase of a prestigious and luxury car undoubtedly remains one of the aspects significantly impacted by digitalization (Winkelhake, 2022). As Winkelhake (2022) reported, in the future, a significant portion of vehicle sales and mobility services will be conducted through online platforms, which will likely offer a diverse range of brands from various manufacturers. The phenomenon of customer experience management aims at adjusting all the point of contact of the brand with the client, the so-called "touchpoints", satisfying the customer needs and achieving long-term customer loyalty for the company (Batat, 2022). It goes without saying that digitalization re-shaped the way to interact with clients and forced automotive industries to offer a seamless and smooth customer experience to their final consumers (Bacher & Manowicz, 2020). From online vehicle configuration and virtual test drives to seamless integration with mobile devices, customers can engage with automotive brands at various touchpoints (Krishnadas, 2021). Informed customers are more likely to make a purchase, and those who receive effective guidance throughout and especially after the purchase are inclined to re-buy the product and be loyal during the time to the brand (East et al., 2021). Therefore, if a company can shape its touchpoints in a customer-centric manner and fulfill the target audience's requirements, significant competitive advantages can be attained (Sherpen et al., 2018). The response of companies and large firms in the automotive sector holds significant importance as it serves as a reflection of the ubiquitous impact brought forth by digital technologies within an organization.

The present study has undertaken the endeavor to orient its research towards the luxury segment of the automotive industry, a domain that still remains relatively understudied in the existing literature. Notably, previous research published so far has generally overlooked the division in the application of digital technologies between luxury and non-luxury brands in the automotive sector, thus highlighting the literature's existing gap: the investigation of digitalization specifically tailored to the luxury automotive sector. The goal of this research work is to examine the integration of digitalization and technology in the business processes of an automotive luxury company and evaluate its impact on market performance. The peculiarity of the research is the fact that it aims to explore how the adoption of digital tools and technologies influences various aspects of the company's business operations.

The study focuses on three critical domains within luxury automotive companies: marketing, network management, and customer service. Network management refers to the efficient coordination and integration of various stakeholders within a company's network, including dealers and partners. Indeed, digitalization has greatly reshaped the way to interact with all the network, which is extremely important for an automotive company. Finally, providing exceptional customer service is paramount in the automotive luxury industry, as it directly impacts customer satisfaction, loyalty, and advocacy. By examining the specific applications and impacts of digital technologies within these areas, the study aims to provide a comprehensive understanding of how digitalization can enhance business processes and outcomes in the context of the automotive luxury industry.

The following research questions are proposed:

1. How has a luxury brand in the automotive sector introduced and integrated digitalization into its internal business processes, thereby improving its market performance?
2. How has the integration of digitalization evolved and established itself as a facilitating tool in attaining specific objectives across diverse sectors of the industry, such as customer service, network management, and marketing?

Two main sources of data were utilized to address the aforementioned questions. As secondary data, reference was made to the annual report published online by Jaguar Land Rover for the fiscal year 2022, along with other data obtained within the company. As primary data, structured interviews were conducted by the author with individuals occupying specific roles within the areas of analysis under consideration.

In order to analyze and address the aforementioned research questions, this study will draw specific conclusions using Jaguar Land Rover as a case study. Jaguar Land Rover holds the distinction of being the foremost investor in automotive research, development, and engineering in the United Kingdom (Tata Motors Annual Report, 2022). The company has established itself as a prominent player in the global automotive

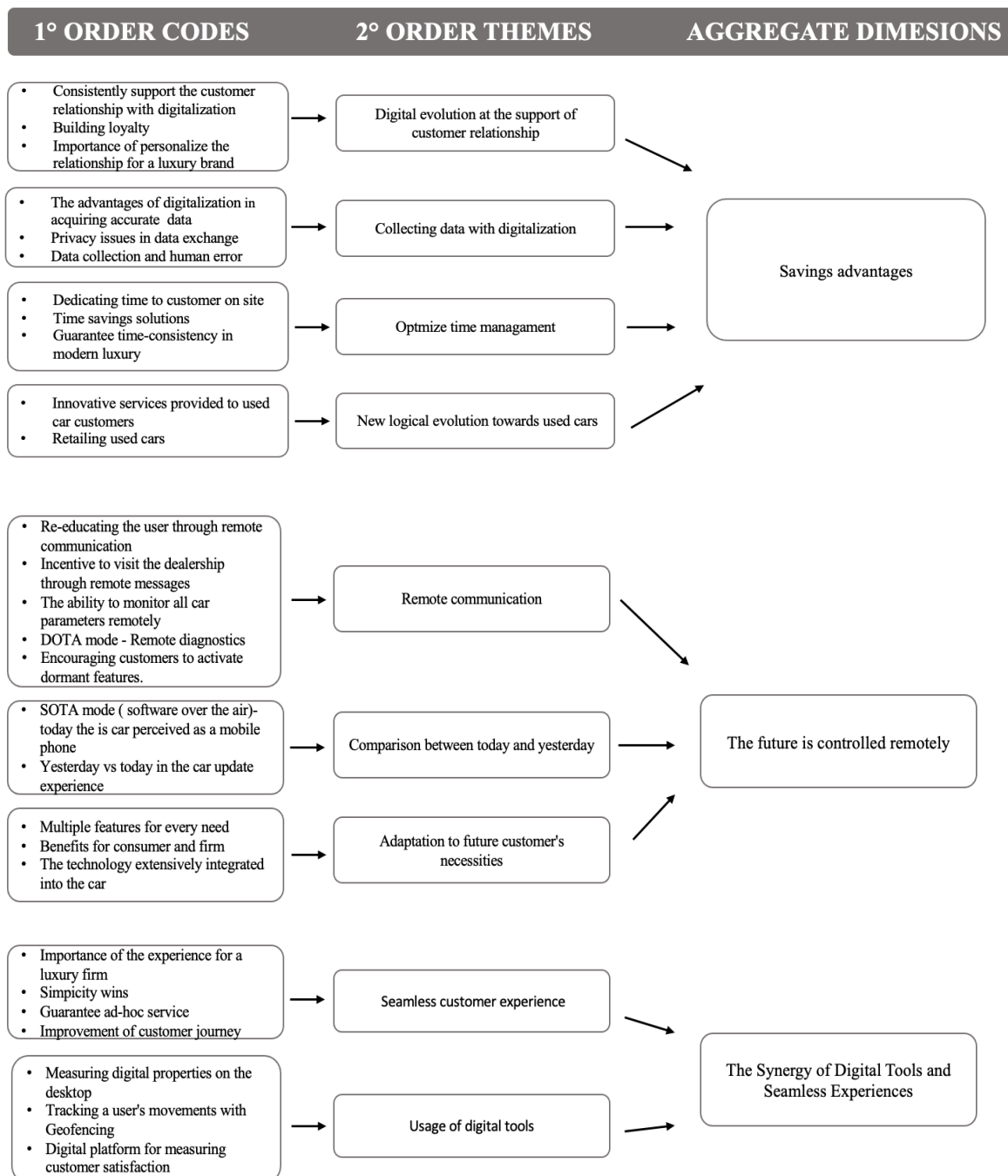
industry by operating with precision and efficiency across a vast network of manufacturing and technological facilities. In addition to its position in the luxury segment, Jaguar Land Rover has been selected as a case study company due to its significant focus on digital transformation. In 2021, the renowned British luxury automaker announced a partnership with Tata Technologies, a global company specializing in engineering, product development, and digital services. Recognizing connectivity as a vital facet of contemporary luxury, the company is actively implementing fresh strategies and innovative programs to revolutionize connected experiences for customers, thereby accelerating its transformation into a prominent digital leader within the automotive sector. Surely, the attention of the company towards digital transformation has been emphasized by the launch of “InDigital. In the short span of a year, it has evolved into a hub of digital excellence, housing 250 experts dedicated to analytics, data science, data engineering, and intelligent automation.

This research project relied on a qualitative approach and employed Gioia methodology that allowed researcher to present findings from multiple perspectives and establish connections between data and theoretical frameworks. The coding process was based on open coding, allowing informant terms, codes, and categories to emerge from the data itself. Going deeper, the three main areas of the research analysis were: Network Department, Marketing Department and Customer Service Department. It has been chosen to focus the study on these three main departments because they have been found to be the areas within the company with fewer accessibility issues. Having had prior contact with some of the individuals employed in these sectors has made it easy to gather data and valuable information for the research. Furthermore, as mentioned in the previous chapter, network, marketing, and customer service represent the most influential areas in terms of digitalization and innovation in the automotive industry. An important aspect to specify is that the three areas exhibit structural differences among them. For instance, the customer service area follows a significantly more data-driven approach compared to the network area. Alternatively, the Marketing area is much more focused on delivering a unique experience, studying extensively the habits and needs of its customer portfolio. Consequently, during the interviews conducted with the various department managers, an initial attempt was made to follow a consistent structure, addressing topics such as operational implementation and their opinion on the latest innovative trends in the automotive industry. However, subsequently, each interview took on its own specific direction. Therefore, the responses reflected precisely this different approach that was present in each specific case.

The data analysis consisted in transcribing all 110 initial codes as direct quotations from the respondents. These 110 quotations were then meticulously categorized and subdivided into 28 first-order codes, each carefully titled to maintain the original language employed by the informants.

the First-order concepts were manually analyzed through axial coding, an approach for generating a spontaneously emerging set of categories and their associated attributes that are suitable, functional, and pertinent for incorporation into a theory (Kendall, 1999). At the end, the outcome of the analysis gave 9

Second-order concepts. After the development of Second-order themes, the methodology delineates the process of comparing and refining the emerged themes into more concise and aggregated dimensions, also referred to as "core categories" that function to encapsulate the elements of an emerging theoretical model (Langley & Abdallah, 2011, p. 17). The final step of the Gioia methodology involves establishing a structured representation of the First-order concepts, Second-order themes, and aggregated dimensions, thereby illustrating the researcher's progression in developing them.



The analysis of the luxury automotive sector has revealed three key overarching dimensions that highlight the transformative force of digitalization.

"Considering "savings advantages" aggregate dimension, optimizing time management is the most frequently mentioned reason behind the exploitation of digital tools. They enable luxury automotive retailers to dedicate more time to their customers by streamlining processes. So, it is clear that from one side luxury automotive retailers need to dedicate time to their customers, especially when they are on-site by providing essential information and prefer quality instead of quantity concerning time. On the other hand, it is relevant to focus on putting in action all the possible activities that allow customers to save time during the purchasing process. In the luxury automotive industry is not only about embracing technology but also about using it strategically to enhance the customer experience, improve operational efficiency, and anticipate customer needs. These dimensions underscore the critical role of digitalization in shaping the future of luxury automotive brands and their ability to stay competitive in an evolving market. After the theme of time management, all the respondents supported and agreed about the importance of digitalization as an element of support in building a personalized and consistent relationship between luxury brand and client. In general, it was observed that all the respondents, in a different manner, have brought to light different perspectives concerning how digitalization improves the process of saving and simplifying processes. More specifically, digitalization implies saving time dedicated to bureaucratic procedures, such as digital signatures for contracts with dealerships, as well as within the customer experience path.

Another aggregate dimension emerged from the analysis is "the future is controlled remotely."

The insights gleaned from the analysis confirmed that the attention towards the pre-owned vehicle market is progressively intensifying, especially when it successfully embodies the allure and innovation reminiscent of a new vehicle. The car of tomorrow takes on a strongly technological essence, capable of anticipating the needs of its users and adapting agilely to changes in the environment. This progress is made possible thanks to the development of remote-control systems and digital transformation, which give dealerships and companies involved in this sector a higher degree of supervision over the vehicle's performance, resulting in an overall improvement in the vehicle's performance. This advancement enables the transference of distinct configurations and supplementary attributes from one vehicle to another, thus affording the customer a personalized experience despite the acquisition of a previously owned automobile.

As confirmed by the literature review, the third key element emerged from the analysis is the ongoing significance within the luxury automotive sector of providing and ensuring optimized solutions in terms of speed and personalization for customers, in order to meet every individual need. The focus on delivering a seamless and personalized customer experience in the luxury automotive sector is confirmed by the evidence of phenomena such as ad-hoc configurations, online appointments and remote car diagnostics. Digitalization

facilitates a deep understanding of customer preferences and streamlines interactions between customers and dealerships, creating a more convenient and satisfying journey.

In the present context, the synergy between digitization and automobiles is exemplified by exceptional phenomena, such as updating software process. What emerged from the interviews is that current vehicles engage with the SOTA mode - Software Over the Air. This underscores the parallelism with updating a smartphone, as today's exceptionally innovative and advanced vehicles incorporate mechanisms bearing strong resemblance to those of a mobile device.

Moreover, a surprising surge in remote vehicle control is projected for the future, leveraging digitalization as a propelling force behind forthcoming processes. A pivotal concept that comes to the fore is the 'DOTA Mode' (Diagnostic Over the Air), which embodies an innovative modality through which vehicles are poised to be managed from a remote standpoint. This technological paradigm facilitates the transmission of software updates and alert communications to vehicles, obviating the necessity for a physical on-site intervention.

The central interplay between the vehicle and the remote control facilitates prompt intervention in technical aspects that require supervision. In practice, this means that the customer receives proactive notifications as specific warning indicators, emblematic of potential vehicular issues, are about to illuminate. However, it is still essential to stimulate customers to go visiting the dealership, even if the majority of interaction can be done remotely. This is because, by promoting the visit on-site, they can discover the latest car lines or be attracted by new accessories for instance. Looking ahead to the future scenario, in addition to the aforementioned phenomena, the luxury automotive industry will be poised to accommodate specific needs or requirements, even if only for a limited duration. The FOTA mode - Features Over the Air - will empower vehicles to meet upcoming demands by seamlessly integrating particular accessories or functions for a defined period of time. Through this approach, customers are not compelled to make immediate purchases, but rather, they are encouraged to contemplate, 'Is it essential?' This allows them to deliberate and potentially opt to incorporate the feature at a later time, in alignment with their evolving requirements.

What emerged clearly is that the future perspectives of luxury automotive recognize digitalization as an enabler of future processes, based on remote communication. This will be the innovative approach able to guide the continuous and rapid changes in customer's necessities, making the car as much as possible.

The final aggregate dimension takes its name from the fusion of two major themes that have emerged: the actual implementation of digital tools, and the necessity to provide consumers with the smoothest possible purchasing experience. The first tool mentioned was Geofencing, a sophisticated technology that involves the creation of virtual boundaries, known as "geofences," around specific real-world geographic areas. These virtual perimeters can be defined using GPS, Radio Frequency Identification, Wi-Fi, or cellular data, and they enable businesses to trigger specific actions when a device, such as a smartphone or a vehicle, enters or exits the designated geographical area. These practical instances substantiated what has been consistently reported

in the existing literature: the automotive domain is undergoing incremental innovation by adopting technological tools that are made attainable solely through the evolution of digitization. Under this perspective, the assimilation of digital instruments unquestionably ensures a competitive edge for an enterprise, positioning it on the cutting edge and equipping it to proficiently harness the resources bestowed by innovation.

All the interviewees have highlighted the necessity of offering both current and, especially, future customers a seamless experience. They reported firstly the high relevance of the customer experience when dealing with luxury products, especially during the last years, especially for today's individuals who have increasingly high expectations and who are fully familiar with the digital reality, almost as if they are accustomed to it. Today it is possible for instance to track the entire customer journey, using tools such as the online configurator or requesting an online quote. It goes without saying that providing a seamless customer experience to customers means using digitalization in order to simplify all the internal processes. This means that a customer that has already been recognized online, the moment he walks into the dealership and provides his name, the dealer already knows everything.

The research project, anchored by the case study of Jaguar Land Rover, illustrates this shift vividly through initiatives like the "Reimagine" strategy and the "InDigital" initiative, aligning with broader industry trends like energy transition and digital adoption. The study's qualitative analysis, guided by the Gioia methodology, unveiled three core dimensions: digital tools optimizing time management, a radical transformation of the automobile concept toward heightened technological sophistication, and an unwavering focus on personalization and speed to cater to individual customer needs. This research project's unique emphasis on the luxury segment highlights the crucial role of digitalization in redefining luxury automotive brands and their ability to remain competitive in a rapidly evolving market. Future investigations could extend this analysis to different automotive segments, providing valuable insights into the diverse impact and challenges of digitalization across the industry.