

# **Famous German Automobile Brands. Their Narratives, History and Logos**

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## **ABSTRACT:**

*This scientific paper presents the authors own views on four German car brands, BMW, Mercedes, Volkswagen and Ford. The work takes the form of a literature review narrative and is intended to help those interested to find out important facts about the founding and development over time of the cars presented, as well as about the history, narratives and logos of the four automobile manufacturers. At the end of the work, specific conclusions are presented, as well as aspects unknown to the readers about the car brands presented and analyzed in this scientific paper.*

**Keywords:** automobile, brand, history, narrative, evolution, logo

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## **I. INTRODUCTION**

We have searched the literature for data, testimonies, stories, accounts, indications or histories about logos, insignia, emblems, but also about the history of the establishment of automobile brands and we have found a multitude of them. For this reason, we have decided to centralize them in this scientific work in the most efficient and effective, complete and concrete way possible. Automobiles are now the most precious means by which man meets his mobility needs. This is due to the great benefits they offer users. Sometimes cars turn out to be priceless collectors' items owned by those who really know them [1, p. 56]. In addition to technology, civilization, comfort and ergonomics, they are also dynamic and fast in moving material goods, goods or people through space. The classic automobile dates back to 1769, when the steam engine was invented and used to transport goods or passengers [2]. Over the years, the industry's biggest automakers have brought certain features to the cars they make to individualize them and build a strong brand image. Thus, elements such as the radiator grilles of BMW, Mercedes-Benz, Audi, Volkswagen, Volkswagen, Toyota, Tesla and others, or the headlights of Peugeot cars have become part of the identity of those manufacturers and details by which people can recognize the cars in their portfolio. Besides these elements, a very important aspect that contributes to brand identity is the manufacturer's logo. With a specific and easily recognizable design, it helps you to quickly find out which manufacturer made a new model of car you've never seen before, or to discover the brand behind a vintage car you've just admired at a car show. However, as well as the impact that car logos have on the people who admire them, it should also be said that these car symbols have incredible stories behind them that are worth telling. In the following, we'll talk about the main car brands, what car logos mean, how they came to be and the story behind each one.

## **II. THE SIGNIFIANCE OF THE ROAD VEHICLE LOGO. LITERATURE REVIEW**

All automobile brands have a story behind them. The significance of road car logos is not only that they represent the brands they symbolize, but also the deep sense of passion, history and vision of their creators. The idea of road car logos originated in 1885, when Carl Benz launched the 1885 Benz automobile, which today is known as the world's first production model ever produced. Conceived as a self-propelled, three-wheeled vehicle with a two horsepower engine, the model needed a detail to individualize it, as several manufacturers were already testing the waters to launch their own car models. So Carl Benz decided, for the first time, to use a brand name and logo to personalize its idea. Following the merger between Benz and Daimler and the development of a new series of cars, Mercedes Benz, the existing logo was replaced with the famous three-pointed star logo, which is still used by the German company today. As the car industry developed, other German and French carmakers began to borrow the idea and give their cars their own logo to ensure uniqueness and better brand recognition. The idea has been taken up by the vast majority of car manufacturers, including Elon Musk's car companies. The significance of the Tesla logo, for example, is far more profound than it might at first seem. Many enthusiastic

automotive admirers know what the logos of the most popular cars represent and what their history is. Elon Musk, a modern visionary with a mind-blowing intellect, has carved destinies and redefined the horizons of technology, and his close connection with the Tesla brand is no exception. Musk's vision has made the logo of these electric cars stand out among all other car logos old and new. Behind his captivating charisma lies an eager consciousness to change the paradigms of the automotive industry. Elon Musk has passionately led Tesla into uncharted frontiers, accelerating the global transition to electric mobility. It has transformed the electric car from an alternative to a necessity, metamorphosing the market and shaping the green future. In the myriad of automotive logos, the Tesla logo is more than just an image; it's a symbol that arouses curiosity and fascination among people around the world. Although seemingly simple, this symbol has the power to evoke images of energy, movement and constant progress. In the explanatory dictionary of the Romanian language, the logo is represented by a symbol, a logo consisting of a set of graphic signs, which constitutes the trademark of a product or a company. In our case, the product is the road vehicle [3].

The logo used for a car is often confused with the manufacturer's brand identity, so it should come as no surprise that the choice of these graphics has always had an important story behind it, directly linked to the identity and history of the car company. That's why, in the following, We'll talk more about the meaning behind the most popular brands' car logos and, if they exist, the story behind them.

### **III. THE BRAND HISTORY, STORY AND LOGO OF THE GERMAN CAR MANUFACTURER BMW**

BMW's history, spanning more than a century, is a testament to the company's dedication to excellence, innovation and passion for driving. From its humble beginnings as a manufacturer of aircraft engines to its current status as a world leader in luxury automobiles, BMW has consistently pushed the boundaries, creating vehicles that embody the perfect combination of luxury, performance and technology. As the automotive landscape evolves, the BMW story continues at the forefront, leading the fight for a more sustainable and connected future [4]. We all know the legend that the combination of white and blue dials is a stylization of an airplane propeller in motion. A plausible explanation, considering the Bavarians' experience in the aviation industry. The myth is often backed up by an image created by the graphic artist Henry Ehlers, depicting two airplanes in flight, with the well-known BMW (Bayerische Motoren Werke) logo superimposed over the propeller. This explanation is as romantic as it is inaccurate. In reality, the round shield, which has been used in BMW's communications since the late 1920s, is a visual evocation of the colors used on the coat of arms of Bavaria, the German federal state where BMW is headquartered. The genesis of this brand can be traced back to the developments brought about by the end of the first armed conflict between the East and the Central Powers. The Versailles peace treaty forbade the Germans from getting involved in aircraft engines, so Gustav Otto and Karl Rapp were forced to produce only railroad components and boat engines. In 1920, the company is bought by investor Camillo Castiglioni, who permanently sets up headquarters in Munich. The first step into vehicle production was the launch of the BMW R32 motorcycle in 1923. It had a boxer engine with longitudinally arranged cylinders, a feature that is still part of the two-wheeled vehicles bearing the German manufacturer's logo. The Bavarians' decision to produce cars came against the backdrop of the financial difficulties of the 20s. After proving that they could produce not only aircraft engines but also motorcycles, German engineers realized the opportunity to acquire an existing car factory. So in 1928 the decision was made to buy Fahrzeugfabrik in the Thuringian town of Eisenach. To the surprise of some of today's BMW enthusiasts, therefore, Munich was not where BMW cars were first produced. Also lesser-known details include the paternity of the first four wheeled BMW, the Dixi model.

The Bavarian engine manufacturer is a name respected by fans and feared by the competition. Models proudly bearing the BMW initials are prized for dynamic driving without compromising on comfort. Like any other heavyweight name in the automotive industry, this brand has found its identity by daring to innovate, but has always combined inventiveness with passion. Nor could it have been otherwise, given that the first industrial product in BMW's history was an airplane engine, and until 1928 it manufactured exclusively motorcycles. Founded on March 7, 1916, the company was formed by the merger of Gustav Otto and Karl Rapp's companies, and the name Bayerische Motoren Werke became official a year later. Today, the blue-and-white logo shines on both four-wheelers and two-wheelers, and the Bavarian brand has taken decisive steps towards an almost exclusively electric future.

A subject of controversy among the company's fans, the meaning of one of the most coveted logos in the premium segment is a simpler dilemma than it seems. We all know the legend that the combination of white and blue dials represents a stylization of an airplane propeller in motion. A plausible explanation, considering the Bavarians' experience in the aviation industry. The myth is often backed up by an image created by the graphic designer Henry Ehlers, depicting two airplanes in flight, with the well-known BMW logo superimposed over their propellers. As romantic as this explanation is, it is inaccurate. In reality, the round shield, which has been used in BMW communications since the late 1920s, is a visual evocation of the colors used on the coat of arms of Bavaria, the German federal state where BMW is headquartered.

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By the time it came into Bavarian ownership, Fahrzeugfabrik was assembling models under license from the Austin Motor Company, so the first BMW was a British-origin model. The year 1932 brought the first BMW designed in-house, the 3/20, which came with more generous dimensions, a redesigned chassis and independent rear suspension. The engine of just 788 cubic centimeters produced 20 horsepower. Hardly imaginable for today's driver, this was within the norms of the time and acceptable in relation to the car's weight of just 650 kg. In 1934, BMW's automobile and aeronautics divisions split and as a result, two separate companies emerged: BMW AG and BMW Flugmotorenbau GmbH.

One of the brand's legendary models, the 328 roadster made its debut in 1936 as the successor to the modest 315/1. The 328's beauty was matched by a performance to match, thanks to its in-line six-cylinder engine with 1,971 cubic centimeters and 80 horsepower. A top speed of 150 km/h made the 328 a natural choice for Grand Prix drivers, and the natural environment in which to encounter it was the 24 Hours of Le Mans, the Welsh Rally and the Mille Miglia. BMW's first four-door model was the 326, which was launched in 1936 and stood out thanks to its torsion bar suspension and hydraulic braking system. Like any German company, BMW did not escape the vicissitudes of Europe's most violent war. After 1933, when it came under the control of the armed forces, the company's activities were redirected mainly towards the production of aircraft engines and armaments. Despite this, cars or motorcycles were still produced, even though the BMW R75 motorcycle and the BMW 325 automobile were only available to military personnel. In 1941, however, the order to halt automobile production was put into effect, so that only the 132 and 801 or 003 airplane engines were still coming out of the gates of the Bavarian owned factories.

The most important facilities for BMW during this period were Zuhlsdorf, Basdorf, Allach and Durrerhof, which were camouflaged to reduce the risk of bombing. After the war ended, Allied troops occupied the BMW factories and dismantled the production lines. The equipment was requisitioned and sold as compensation to the victor states. The first BMW vehicle to be produced after all the turmoil of the war did not roll off the production line until 1948, and that was, as we have already mentioned, the R 24 motorcycle.

The 1950s brought the German manufacturer into a paradoxical situation. The BMW range simultaneously offered both the impressive 502, the 'baroque angel' with a 100bhp V8 engine, and the humble but likeable Isetta, a one-door, 13-horsepower quadricycle. By far the most intriguing BMW of this period is the 507 convertible, a 502-based model with a slim silhouette, timeless design and a 0-100 km/h sprint of just 11 seconds. The company's financial situation was far from rosy, and as the years went by, its luxury models became increasingly uncompetitive, while at the bottom of the range, there was nothing to generate high sales volumes. The man who saved the day was the industrialist Herbert Werner Quandt, who in the early 1960s invested heavily in the "Neue Klasse" project that would redefine the entire BMW offering.

The signal of the new era was given at the Geneva Motor Show in 1961 with the unveiling of the 1500. There followed a whole succession of highly acclaimed cars throughout the decade, such as the 1800, 1600 or 2000 sedans or coupes like the 2000 C, 2000 CS and 3200 CS, as well as the majestic BMW E9. The 1602 model was placed at the bottom of the range, but on its basis one of the brand's legends was developed: the sporty 2002 Turbo, the first turbocharged BMW offering 170 hp. In 1967, the old Munich plant reached its maximum production capacity, so the company's managers took the decision to purchase the facilities in Dingolfing and Landshut from Hans Glas GmbH, a manufacturer that was no longer able to cope with market conditions. Two years later, success in the automotive segment forces BMW to move motorcycle production to Berlin-Spandau.

The year 1972 brought BMW's first factory outside Germany, and the decision of the board was that Rosslyn, South Africa, would host the production line of the BMW 1804 SA, 2004 SA and 2000 SA models. Back home in Munich, BMW wowed not only car enthusiasts but also architecture buffs with a new headquarters housed in the avant-garde "four-cylinder" building. Also on the Old Continent, the 1970s brought a new reshaping of the German manufacturer's offerings, and the three models introduced in the decade remain BMW's core 50 years on: 3 Series, 5 Series and 7 Series. The first to hit showrooms was the 5 Series in 1972.

Initially launched with four cylinder engines only, by the end of its career it was fitted with in-line six-cylinder units only. The power range offered by this model varied between 89 and 195 hp, and the second generation came in 1981. The 3 Series was introduced in 1975, first as a two-door sedan and then as a convertible. The first generation of the car that has become, over time, the most iconic Bavarian model was not available in the four-door version that's everywhere today. The BMW 3-Series offered between 75 and 140 horsepower, and its successor, the famous "Teddy Bear," replaced it in 1982. The one that more and more people are choosing to

call the Seven made its debut in 1977, and since then has been the most dangerous competitor to the famous Mercedes-Benz S Class.

The 7 Series was the first BMW to feature an on-board computer, a service interval indicator and even an electronic dashboard to indicate engine malfunctions. What's more, for the first time in the Bavarian manufacturer's history, the top of the range could be ordered with ABS and a driver airbag. The entry-level model was equipped with a 150 hp in line six, while the top performer, the 745i, had a turbocharged unit delivering 252 hp.

Only one element was missing for BMW to definitively place performance at the forefront of its core values, and it was added in 1978: the M1. The model represented the commercial debut of BMW Motorsport GmbH, known today as BMW M GmbH, the brand's sports division later responsible for iconic models such as the M3, M5, M6 and M8. With a centrally located engine and started as a project developed in conjunction with Lamborghini, the BMW M1 is a genuine supercar. It was produced between 1978 and 1981, in just 453 examples, and its performance was worthy of its Maranello rivals: 277 hp and a top speed of 277 km/h.

The 1980s saw the success of BMW models, which were gaining market share every quarter. The new factory, built from scratch in Regensburg, was designed to meet demand for the 3 Series. At the same time, the experimental design center BMW Technik GmbH, set up with the aim of bringing new ideas into the market without the pressure of commercial success, was launching one of the brand's most atypical models into series production: the Z1. Launched in 1988, the roadster had a plastic body with removable body panels, and its doors did not open on conventional hinges but retracted into the floor.

The 1990s began gloriously for BMW with the launch of a grand tourer that has become legendary. The BMW 8 Series was only available with V8 and V12 engines, while the 850 CSi boasted a 5.6 liter, 381 hp engine. In 1994, the BMW plant in Spartanburg, South Carolina, USA, opened in time for the BMW Z3 to go into production the following year. Left with no roadster in the range and stiff competition from Porsche and Mercedes-Benz, the Bavarians hit back with a model that became a classic in its infancy thanks to its fluid design and impeccable handling. Also in 1994, BMW makes a move unprecedented in the company's history and buys the British Rover group, including the Land Rover, Range Rover and Mini brands.

Of all these, only Mini is still part of the BMW group today, but along the way it has been joined by a prestigious partner. Rolls-Royce became Bavarian owned in 2002, after a lengthy process of acquiring the brand and production rights. All the while, the duel between BMW and Volkswagen, the group that temporarily owned the British luxury manufacturer, was the talk of the international press. So BMW ended the 20th century with an enriched portfolio and much to be proud of, but also with an innovative product with no predecessor and destined for success: the X5, the company's first SUV.

The year 2001 saw the re-launch of the Mini brand in a market segment previously inaccessible to conventional BMW models: the small, premium class. With sales estimated at 100,000 units a year, in 2007 the British brand reached a record 230,000 vehicles sold worldwide, the culmination of financial efforts to upgrade BMW's Oxford plant. The Rolls Royce Phantom goes into production in 2003 at the new factory, built with BMW money in Goodwood, Sussex, UK.

In 2004, BMW ventures into a new market segment with the 1 Series premium hatchback, a replica of the Audi A3 and Mercedes A Class. That same year sees the opening of the Dadong plant in Shenyang, China, owned by BMW Brilliance Automotive Ltd. In 2005, BMW inaugurates another production facility, which opens in its mother country, Leipzig. Two years later, the BMW Welt (the showroom and delivery center, housed in an avant-garde, tornado-shaped building) is inaugurated next to the brand's headquarters, and in 2013, the Munich-based manufacturer's first vehicle is unveiled: the i3. Today, BMW boasts a booming range of electric vehicles, and the latest example is the iX3 SUV, which promises a range of up to 460 kilometers. Sports enthusiasts haven't been forgotten either. The latest product from the BMW M GmbH division is the BMW M5 Competition, which blows the competition out of the water with a 4.4 liter V8 with 625 hp, capable of a 0-100 km/h sprint of just 3.4 seconds.



**Figure 1: The current logo and its visibility of the German car manufacturer BMW [6].**

Like any success story, BMW's history has its ups and downs. From now on, you know exactly the story of the manufacturer that today boasts models such as the BMW 320d E46, BMW Z4, BMW M5 E39, BMW 760i E65, BMW 540i E34, BMW M5 E60, BMW 725 tds E38, BMW M3 E46, BMW 330i E46 Touring or BMW 325i E30.

So, since it was founded in 1913, BMW's business was not making cars, but airplane engines during the First World War. Since BMW was banned from making airplanes after the war, it had to re-focus and started producing various vehicles such as motorcycles and motorized bicycles. However, in 1929, the founders took a bold decision and started making cars, and it proved to be a successful one. The company's owners haven't forgotten its origins, so the BMW logo represents the propeller of a moving airplane, painted in the colors of the Bavarian flag: white and blue. The name BMW is an acronym for Bayerische Motoren Werke, or Bavarian Motor Works.

For a car to satisfy all the driver's needs, it needs to be equipped with state of the art technology. One of the most important changes BMW implemented was the introduction of xDrive technology. This ensures driving pleasure and safety during the journey, regardless of the road conditions. The BMW car logo represents an airplane propeller in motion, with the blue symbolizing the sky (Figure 1). Over time the logo has undergone various design changes (Figure 2).



**Figure 2: Logo of the German car manufacturer BMW from its genesis to the present day [6].**

#### **IV. THE HISTORY, STORY AND LOGO OF THE GERMAN CAR MANUFACTURER MERCEDES**

Mercedes wasn't the name of the founder or the name of a big car company. It was the name of the daughter of an automobile-loving father. He thought his daughter's name would bring him good luck. And lo and behold, it did. The car named Mercedes won back-to-back races. Sparked by these victories, thousands of Mercedes cars have been produced from 1902 to the present day. A father's love made his daughter's name one of the world's greatest automobile manufacturers. Emil Jellinek, known after 1903 as Emil Jellinek - Mercedes (Figure 3), born in Leipzig on April 6, 1853, died on January 21, 1918, was a wealthy European automobile entrepreneur of the Daimler - Motoren - Gesellschaft (DMG), responsible in 1900 for commissioning the first "modern" passenger car, a 35 horsepower (HP) Mercedes Jellinek created the Mercedes brand in 1902, naming cars after his daughter. The trademark became Mercedes Benz, and today it is among the largest and most famous brands of road cars in the world. Jellinek lived in Vienna, Austria, but later moved to Nice on the French Riviera, where he served as Austro-Hungarian Consul General. Mercedes Adrienne Manuela Ramona von Weigl, also known as Mercedes (Figure 3), born Jellinek, divorced Schlosser. She was born in Vienna on September 16, 1889, died on February 12, 1929, the daughter of Austrian diplomat and businessman Emil Jellinek and his wife Rachel Gogmann Cenrobert. It is called Mercedes-Benz, which in 1926, when Daimler - Motoren - Gesellschaft merged with Benz & Cie, giving rise to Daimler Benz, which was changed to Mercedes -Benz. Her baptismal name, inspired by the princess of Asturias, Spain, Maria de las Mercedes de Borbon y Habsburg - Lorena, means "gracias" in Spanish, and in free translation from Spanish means "thank you". In 1909, the daughter of the great industrialist married the Viennese Baron Karl Schlosser, with whom she had two children, his daughter Elfriede in 1912 and their son Hans-Peter in 1916. She divorced her husband in 1926, and later married the sculptor Rudolf von Veigl. Emil Jellinek also wanted to bear his daughter's name and asked him to use her surname Jellinek-Mercedes es. In June 1903, his request was approved. Emil Jellinek-Mercedes commented on the decision that it was "probably the first time a father has ever borne his daughter's name". Mercedes Adrienne Manuela Ramona von Weigl, known as Mercedes, died at the age of 39 of bone cancer.

The history of Mercedes-Benz belongs to people who dedicated themselves to a dream of absolute mobility. Thus, alongside Carl and Bertha Benz, personalities such as Gottlieb Daimler, Wilhelm Maybach, Emil Jellinek and his daughter Mercedes played a major role in the success story called Mercedes-Benz.

In the 1880s, when Gottlieb Daimler and Karl Benz invented the high-speed engine and the automobile independently of each other, they laid the foundations for private motorized transport. With the help of partners and financial backers, the two engineers continued their development work privately within their own companies. In October 1883, Benz founded Benz & Co. in the city of Mannheim; Daimler-Motoren-Gesellschaft (DMG) was founded in November 1890 in the city of Cannstatt.

Both companies set out to create a memorable brand that would give their products both distinction and familiarity. Initially, they chose their own names - Benz and Daimler - to represent the origin and quality of the

engines and cars they made. Later, while the Benz & Cie. brand remained unchanged (although the cogwheel surrounding the Benz name in 1903 was replaced with a laurel wreath), by the turn of the new century DMG products were appearing under the trade name Mercedes.

Together with businessman Max Rose and sales representative Friedrich Wilhelm Esslinger, Karl Benz founded Benz & Co. Rheinische Gasmotoren-Fabrik (renamed Benz & Cie. after 1899) as a public limited company.

The number of company employees quickly increased to 25, and permits were issued to build gasoline engines. Finally financially secure, Benz could now focus all its energies on the development of car engines. To this end, it began by designing a universal car in which it could integrate its four-stroke gasoline engine. Its rival Daimler, on the other hand, integrated its first engine into a carriage. In 1886, Karl Benz was granted a patent for his car, presenting the first "Benz Patent-Motorwagen" to the public.

Three versions of the three-wheeled car were produced between 1885 and 1887: model No. 1 was presented by Benz to the German Museum in 1906; model No. 2 is believed to have been modified and rebuilt several times, and model No. 3, which was fitted with wooden-spoked wheels, was driven by Bertha Benz on her first long-distance trip in 1888.

Due to the growing demand for stationary engines, Benz & Co. Rheinische Gasmotoren-Fabrik was able to move into a larger production facility. After the arrival of new partners Friedrich von Fischer and Julius Ganß in 1890, Rheinische Gasmotoren-Fabrik became the second largest engine manufacturer in Germany. In 1893, Karl Benz introduced the spindle steering system to the automobile industry. In 1896, he also developed the "contra" engine, the predecessor of the horizontally opposed engine.

The Daimler-Motoren-Gesellschaft (DMG) was officially founded in 1890, following notarization in Stuttgart. This confirmed approval for inventions associated with the Daimler company. On March 14, Gottlieb Daimler, Max Duttendorfer and Wilhelm Lorenz concluded a preliminary contract.

In October 1894, Gottlieb Daimler temporarily left DMG and formally renounced his share.

Together with Wilhelm Maybach, he devoted himself to the further development of the car in the disused garden of the Hotel Hermann in Cannstatt.

DMG built the world's first truck in 1896. The vehicle was delivered to Great Britain.

In 1900, DMG and Jelinek entered into an agreement in Nice concerning the marketing and distribution of Daimler cars and engines. It was also agreed "to develop a new type of engine under the name Daimler-Mercedes". The pseudonym "Mercedes", chosen by Jelinek because it was his daughter's name, thus became a brand name for the first time. That same month, in April, Jelinek ordered 36 cars from Cannstatt at a total price of 550,000 gold marks.

In 1902, Motorfahrzeug - und Motoren-fabrik Berlin AG in Marienfelde was taken over by DMG, which was an important merger for the time. In 1903 new production facilities were set up in Untertürkheim (Stuttgart) and the company headquarters were moved from Cannstatt to Untertürkheim.

In 1907, Chief Design Engineer Wilhelm Maybach left the Daimler-Motoren-Gesellschaft. His successor as head of the design and technical management office was Paul Daimler.

After the war, both DMG and Benz & Cie. were hit by the economic crisis. Diversification was necessary and, as a result, typewriters were produced in Untertürkheim in addition to cars.

At an extraordinary shareholders' meeting in 1922, Daimler-Motoren-Gesellschaft decided to move its headquarters from Untertürkheim to Berlin for tax reasons.

The difficult economic situation and the large number of car manufacturers on the market made partnerships a necessity. By 1924, Daimler and Benz were already working together in a joint venture offering cars under the name "Mercedes-Benz".

In 1923, Ferdinand Porsche took over from Paul Daimler as head of the DMG design office.



**Figure 3: Entrepreneur Emil Jelinek and his daughter Mercedes Adrienne Manuela Ramona [11].**

In 1924, Benz & Cie and Daimler-Motoren-Gesellschaft merged to become a joint venture. The joint commercial activities for the "Mercedes" and "Benz" brands were taken over by the newly founded Mercedes-Benz Automobil GmbH.

On August 5, 1888, 39 year old Bertha Benz drove from Mannheim to Pforzheim with her sons Richard and Eugen, aged thirteen and fifteen respectively, in a Model III from Mannheim to Pforzheim without telling her husband and without permission from the authorities, thus becoming the first person to drive a car over any significant distance. Prior to this historic journey, motorized drives were only very short trials, back to the point of origin, done with the help of mechanics. Following in the footsteps of the wagons, this pioneering tour covered a unique distance of about 106 km (66 land miles).

Although the ostensible purpose of the trip was to visit her mother, Bertha Benz had other motives - to demonstrate to her husband, who had failed to adequately consider commercializing his invention, that the automobile in which they had both invested heavily would become a financial success once it proved useful to the general public; and to give her husband confidence that his constructions had a future.

So, surprisingly, the story of the Mercedes logo begins before the company even existed. In 1900, when Gottlieb Daimler was a director at another company, he sent a letter to his children in which he drew his house and a three-pointed star symbolizing prosperity. Although the name Mercedes would be registered in 1902, it was not accompanied by a logo. The famous Mercedes logo, which can still be seen today on the company's latest models, was chosen in 1909, when Gottlieb Daimler's sons Adolf and Paul remembered the logo drawn in a letter from their father and, in a sign of respect for him, chose it as the Mercedes logo. Another significance of the Mercedes logo is the company's versatility in its early years, producing engines for air, sea and land use. The company's name, still used today, was given in 1900 by businessman Emil Jellinek, who, driving a Daimler model, decided to name it Mercedes after his daughter.

For more than a century, the emblem, symbol, logo or logo of Mercedes cars has been represented by a three pointed star signifying conservatism, reliability, trusted, reliable, serious, first-class performance and reputed engineering (Figure 4). Although the evolution of the company's logo covers more than 120 years, the current Mercedes emblem, the three-pointed star, springs to mind. In the first version of the emblem, the word "Mercedes" surrounded by an ellipse appeared on cars produced by Daimler in 1902. After a while, the company introduced a new logo, the now famous three-pointed star, designed by Deutz's technical director Gottlieb Daimler. He created this design on a postcard, which he sent to his wife in 1872, vowing that one day it would be the symbol of remarkable automobiles.



**Figure 4: Changes to the Mercedes logo 1901 - present [7].**

The three pointed star represents Mercedes-Benz's dominion over land, sea and air. The Mercedes logo has undergone various changes over the years (Figure 4).

## **V. BRAND HISTORY, STORY AND LOGO OF GERMAN CAR MANUFACTURER AUDI**

It has always been heard that the Audi brand was born in 1969 from the merger of Auto Union and NSU. However, little people comment that Auto Union was not originally a brand itself, but the company was founded in 1932 to bring together the brands under one roof DKW, Horch, Wanderer and, incidentally, Audi.

Audi was born out of passion and history has given it nothing but failures, relegated it to second place, "stole" its own designs that were marketed under other brands and even killed it. Today, while other brands are looking to save money in ways that are increasingly obvious to the customer, Audi can be seen as a quality brand with levels of demand that, by category, exceed even those offered by those two rivals that for years thought they were stealing from each other.

In 1896, Karl Benz hired engineer August Horch (Figure 5) to develop and manufacture its engines. There was more than a purely business interest in this employment given that Mr. Horch was descended from a well-known family whose nobility dated back to the time of Charles IV of Luxembourg (14th century) and that they had been keepers of the coat of arms of the Palatinate county since the 15th century. In short, Karl Benz needed the money.

In 1899, August Horch abandoned the Karl Benz project, founded his own company August Horch & Cie and, two years later, put his first model on the road: the Horch 4-15 CP. However, this company had economic problems and other misunderstandings between the partners, so August Horch decided to leave it and found in 1909 another company called August Horch & Cie Motorwagenwerke AG.

Without being too cruel, we have to admit that the similarity in the new company's name to the old one has given the world a bit of a tug. In any case, the judge thought the same and forced August Horch not to use his surname in the company name, so he translated it into Latin and renamed his new business venture as Audi Automobilwerke. Although many biographers believe that the first Audi marketed was the Audi Type F104 100 C1 in 1968, already in 1910, the Audi Typ A hit the streets of Zwickau, replaced the following year by the Audi Type B and in 1912 by the Audi Type C. Incidentally, the latter model was the winner in 1912, 1913 and 1914 of the *Österreichische Alpenfahrt* (loosely translated from the German, the Austrian Alpine Race).

In the following years, Audi's catalog was growing with more luxurious and basic models in addition to starting production of trucks that were quickly recognized for their sturdiness and reliability. Moreover, the outbreak of the First World War in 1914 did not alter the brand's expansion plans, which only stopped short of selling its products to private individuals for sale to the German imperial army, which did not displease August Horch, who was a fervent defender of the imperial cause.

As the war progressed, however, the German army moved August Horch into more administrative positions, taking his work away from the creative positions that characterized his professional career.

After World War I, the so-called hyperinflationary period of the Weimar Republic, which forced car brands to continue to produce the products they offered before the war due to lack of resources and the inability to obtain funding for new product development.

In spite of these limitations, as soon as it was able to invest in new developments, the brand launched the Audi K-type equipped with such modern technical solutions as a light-alloy cylinder block with cast-iron linings and a four-wheel braking system. A very interesting product for the time that had not left the mind of August Horch, who was still employed by the German authority for administrative tasks, for which August Horch eventually decided to leave the brand and move to Berlin. The Audi Typ K was a resounding commercial and economic fiasco, and the subsequent Audi Type M even bigger, so the brand decided to once again resort to the ingenuity of August Horch in an attempt to save the company's fate.

Under its founder's command, the Audi Typ R desperately planned the Audi Typ R, dubbed the "Imperator," as a big luxury car that could be sold with ample profit margins that would give the company's books a breath of fresh air. Unfortunately, this third model was its third commercial failure and the one that would drag it into insolvency.

In this desperate situation and with the company's value below zero, it was Danish businessman Jørgen Skafte Rasmussen, owner of Zschopauer Motorenfabrik, better known as DKW, who took over the majority of Audi's shares, so at this point we can clearly say that there was no business merger, but that DKW bought Audi. However, this capital injection was of little use because the 1929 Wall Street stock market crash put this business group on the ropes again.

The union of four car manufacturers in serious economic difficulties, Audi, DKW, Horch and Wanderer, gave birth to the Auto Union AG business network, which devised a business plan for market segmentation to avoid inter-brand competition:

- Audi would produce upper mid-range models;
- DKW would produce small vehicles and motorcycles;
- Horch would make the most luxurious vehicles;
- Wanderer would produce lower mid-range vehicles.

Within a few years, while Horch occupied more than half of the high-end vehicle market, the other three manufacturers had anecdotal sales, highlighting Audi's ridiculous share of total Auto Union sales in 1938: 0%.



**Figure 5: August Horch founder of AUDI [8].**



So, plunged back into an unsustainable economic situation and a pre-war environment, Auto Union's hopes of survival were fading.

In order to save costs, Auto Union director Richard Bruhn, the so-called "father of Audi", decided to use his position as a leading member of the German National Socialist Socialist Party to incorporate slave labor. In fact this automobile group ended up with its own concentration camps with a capacity of 3,700 prisoners. Despite the money saved by this controversial and embarrassing move, Auto Union AG never managed to raise its head and 1948 saw its permanent removal from the trade register.

After the end of the Second World War, Germany was totally destroyed, and with it its entire industrial fabric. What few people know is that a year after the demise of Auto Union AG, a new company was founded in Ingolstadt. The new company was called Auto Union GmbH.

This new firm, in which a large proportion of the workers came from the former Auto Union AG, focused on a project that was quite successful throughout Europe: the DKW F 89L, a van that proved to be ahead of its time due to its minivan design and the forward location of its front axle. In fact, this van was manufactured in Spain by Imosa with the feature that the Spaniards fitted a Mercedes-Benz engine. This van was so modern in its design that its frame was used to give life to a series of small utility vehicles marketed as the DKW F 89, but its reception was not as popular as that of the industrial vehicle and, for the third time in its history, the numbers have yet to appear. In 1958, Daimler Benz AG buys a majority stake in Auto Union AG and launches the first and only model of the new brand: Auto Union 1000. This new model was not as new as it wanted the market to see, as it was actually stuck in a thorough update of the DKW F94 which continued to be marketed as the DKW 900 and become an economical option to the Auto Union. This model remained in force in Europe until 1963, although in Brazil and Argentina it was produced until 1967 and 1969, though always under the old DKW F34 name. I only say model because its replacement was the 1963 DKW F102, which is true that in some markets it was sold as the Auto Union.

At this point you can see which Audi was first to market. In 1965, the DKW F102 began to be sold as the Audi 103, with the trade names Audi 60 and Audi 75. It was basically the same car as the DKW, but equipped with a four-cylinder engine developed by Daimler Benz. It wasn't until 1968 that Auto Union GmbH launched the first Audi product: the already named Audi Typ F104 100 C1, which in some markets was sold as the Auto Union Audi 100. This new vehicle interpreted the basic lines of previous DKWs in a modern key and had much lower quality and technical standards than BMW or Mercedes-Benz. However, part of its commercial success was due to the fact that it offered a much more modern and understated line than its contemporaries: it had a much more modern body than the BMW Neue Klasse and more discreet than the Mercedes-Benz W114.

Audi NSU Auto Union AG was a manufacturer of mid range vehicles with another competing success. In an attempt to improve the brand's image, it developed a 4-meter-long sedan with a new rotary engine that was as impressive as it was disastrous: compression problems after 78 kilometers, engine replacement at 20,000 kilometers, fuel consumption close to 50,000 liters per 20 kilometers. frequent need to remove spark plugs for cleaning and all of this derived from a miscalculation of the size of the internal rotor which caused it to rub against the rest of the moving parts and accelerate wear on cold starts. This new vehicle was the NSU Ro 80 and was also a commercial success, lasting just over a year. After that, nobody bought an NSU, let alone second-hand. In fact, the manufacturer started swapping out the rotating blocks for the Ford Essex V4 engine units fitted to the Ford Transit MKII MKII, but it didn't convince the market either. In spite of all these problems stemming from the poor quality of what was to be its flagship model and which had such a negative impact on its profits, NSU went ahead with the development of a 4-meter-long medium saloon with an aerodynamic design inspired by that model, of its fragile large saloon. However, for this model, which would be called the NSU K45, a simpler inline four-cylinder engine block was designed. The development costs of this new sedan and the warranty costs of the rotary-engined model meant that NSU's economic situation began to falter, leading to the company being taken over by Volkswagen and merged with the newly revived Audi.

This operation was very advantageous for Volkswagen. The acquisition of the Audi and NSU brands did not involve a significant outlay and yet it found the car that is still an important pillar in Volkswagen sales today: the NSU mid-saloon project went ahead, but when it saw the light of day in 1970. it was marketed neither as Audi nor as NSU, but instead this development came on the market as the Volkswagen 70 and is the forerunner of the Volkswagen Passat. And is that while it all stays at home, it's also fair to recognize that the Volkswagen Polo was born in 1975 as an economical version of the Audi 50.

Starting in the 1970s, Audi began to become the brand we know today. In the 70s and 80s, it introduced the various generations of the Audi 80 and Audi 100, offering the public vehicles with a certain exclusive touch, with lines that were as discreet as they were elegant and, most prized of all, with quality standards that surpassed all the mainstream brands. It also knew how to stand up to the brands that at the time had more prestige than Audi by presenting the Audi Coupe B2 in 1980, a sleek two-door vehicle that managed to wow the public with its understated sporty lines, much more modern than those carried by models such as the BMW E 21. However, Audi held off its competition again with the unveiling of the Audi Quattro, an all-wheel-drive sports variant with a

minimum output of 203 horsepower that in the 1980s put the four rings at the top of the podiums in the racing world.

These days, Audi needs no introduction. Everyone knows the four rings and everyone already associates them with technical and quality levels at the top of every category in which it is present. Leaving aside micro-urbans and MPVs, Audi has at least one model in every segment that is fast becoming the benchmark for its competitors.

Whether with a utility like the Audi A1, with a luxury sedan like the Audi A8, or with an all-around kind like the Audi Q7, the brand has managed to bring the product closer to the discerning public that values performance, quality and the customization possibilities that underpin these cars.

On the less positive side, not to say negative, I want to comment as a totally personal opinion that Audi has for years abused an excessively cloned aesthetic between its various models that could cause the uninitiated to confuse them on the street. The latest versions, such as the Audi Q2, show that something is changing when it comes to design.

The Audi logo is composed of four interlocking rings, representing the unity of the founding companies: Audiwerke AG, Horchwerke AG, Zschopauer Motorenwerke J. S. Rasmussen AG (DKW) and Wanderer Werke AG. The brand names Audi, DKW, Horch and Wanderer were also kept within the company. Each of the group's four brands was assigned a specific market segment.

Thus, DKW covered the motorcycle and small car segment, while Wanderer built and sold medium-sized cars. Audi marketed mid-size luxury cars and Horch dealt with luxury, high-end cars. Today, Audi is part of the Volkswagen group and is one of the largest luxury car manufacturers not only in Europe but worldwide.

Fans can relive the history and production experience of Audi cars at the August Horch Museum in Zwickau as well as the Audi museum mobile in Ingolstadt. Until September, visitors to the Ingolstadt museum can see the special exhibition "The Fifth Ring". It tells the story of NSU, the oldest predecessor brand of the current company. Those wishing to visit the museum from the comfort of their home or while traveling can enjoy a tour at any time using the Audi Tradition app.

In 1909, the first Audi logo appeared. Audi has one of the simplest logos in the car industry: 4 rings joined together. As simple, as memorable and ingenious. Diagonally oriented, it was a fitting one for a car company at the time. But it didn't stay in the founder's good graces for long. August Horch only used it for a few months. That seems to have been the credo of those who designed the famous Audi logo. But before the 4 circles joined together that we know today, the German brand's emblem underwent several changes.

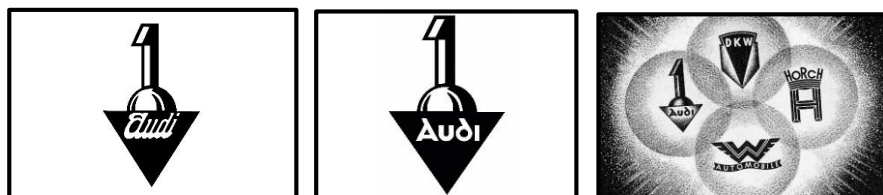
To find out about them, we have to go right back to the very beginnings of the company, when Audi was not actually called Audi. In 1899, the very clever engineer August Horch founded August Horch & Cie in Mannheim. Four years later, the company moved to Zwickau. At first, Horch built 2 and 4 cylinder engines, but then he wanted to go a step further and switched to more powerful 6 cylinder engines.

The first 6 cylinder unit was created in 1909, the year that would change everything for Horch and the automotive industry. The engine did not prove very efficient and brought the company to the brink of bankruptcy. Seeing this, the board of directors decided to oust August Horch. But this did not deter the German. Soon after, Horch opened a new company bearing his name. Only his former business partners had a say in the matter. Horch had no choice but to rename his new business. He didn't think long, and translated his surname into Latin. For those who don't know

"Horch" in German means to listen. After the Latin translation, Horch became Audi.



**Figure 6: First logo of German car manufacturer AUDI (1909) [9].**



**Figure 7: Logos used over the years by the German car manufacturer AUDI [9].**

The first Audi logo also appeared in 1909 (Figure 6). Diagonally oriented, it was appropriate for a car company at the time. But it didn't stay in the founder's good graces for long. August Horch only used it for a few months. Soon after, he came up with a new logo, this time a bit more complicated than the first. The Audi name was framed in a downward-pointing triangle, and above it was the number 1 on a spherical base (Figure 7).

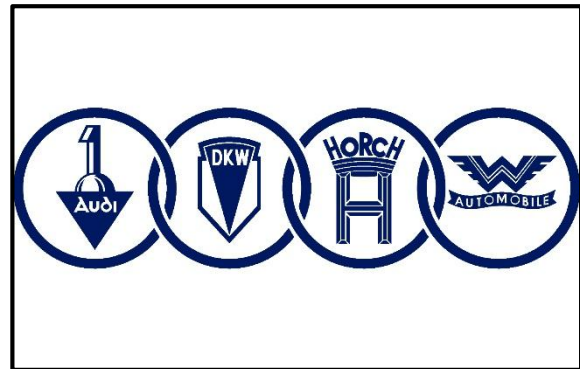
This emblem didn't last very long either. The third attempt was lucky. Most of the original elements were retained, but the font in which the company name was written was changed.

In 1910 it was time for the new Audi emblem to appear on the company's first model: the Audi-A.

A year later, it was followed by the Audi-B and then the Audi-C. In June 1911, three Audi-Bs were on display at the first stage of the Auto Alpenfahrt competition in the Austrian Alps. It was one of the most difficult rallies of the time, one that Audi won three consecutive times between 1912 and 1914. Despite the attention, the 1920s proved very tough for August Horch. His new company, Audi, was once again on the verge of bankruptcy. The bad news didn't last long, because in 1928 Audi was rescued by another heavyweight name in the industry: DKW.

The founder, Jorgen Skafte Rasmussen, began to dabble in the automotive world with steam-powered automobiles. That was in 1916, but Rasmussen abandoned the idea rather quickly and focused on developing two-stroke engines, just as Audi had done in the early days. In this way, DKW became one of the leading motorcycle manufacturers of the time. It wasn't until 1928 that DKW started producing automobiles. The world was to be hit by a great economic crisis in 1929, and the car industry, like many others, was severely affected. The brands had no choice but to enter into various alliances in a desperate attempt to save themselves. So in 1932, Audi, Horch (the old company), DKW and Wanderer (originally a bicycle and motorcycle manufacturer, and since 1913 also a car manufacturer) joined forces to become Auto Union AG. Germany's second largest car manufacturer by units produced.

This is also when the four rings that today form the Audi logo first appeared (Figure 8). The four circles were connected to each other and each corresponded to one of the four companies that founded Auto Union, each brand had equal rights in the newly founded concern, which is why the logo of each brand is in the circle. Until the outbreak of World War II, Auto Union launched two models equipped with Wanderer engines and front-wheel drive wheels, which were very successful. After the conflict, Auto Union's status was changed in line with the laws of socialism. In 1949, the German company's logo was modified and simplified. The 4 rings were kept, but the logos of the founding companies were removed and replaced by a single name, Auto Union, framed in a rectangle.



**Figure 8: The 4 circle logo used after 1932 by the German car manufacturer AUDI [9].**



**Figure 9: Logo used after 1949 by the German car manufacturer AUDI [9].**

Nine years later, the majority block of shares was taken over by Daimler-Benz AG, which in turn transferred it to Volkswagen. This transition was finalized in 1965 and the Audi name was to be used again.

By the end of 1968, Audi was back on top, thanks in large part to the new Model 100. But don't think the name epic stopped there. There was another episode. Father Volkswagen decided to acquire Neckarsulmer Automobilwerke in 1969. So the company name was changed again, to NSU Auto Union Audi. Of course, it was the beginning of another period of German logo experimentation. First a logo appeared that integrated the words Audi NSU in a black border. A few months later, the 4 rings reappeared, this time thicker and closer together. Blue was the color of choice.



Figure 10: Logo used after 1969 by the German car manufacturer AUDI [9].

In the same year, 1969, the German brand came up with an alternative logo: the name Audi was written in a white font, which was to become famous, and framed in a black oval shape. Nine years later, the background became red.

After a long series of creative endeavors and branding attempts, starting in 1985, the German company reverted to the simple name, familiar to us today: Audi.



Figure 11: Logo used after 1995 by the German car manufacturer AUDI [9].



Figure 12: Logo used after 2009 by the German car manufacturer AUDI [9].

The two part logo (the rings and the oval shape) disappeared in 1995. At that time, the four rings were given a 3D graphic and painted in glossy silver, and the Audi name was inserted underneath them, finished in a bright red (Figure 11). The Ingolstadt manufacturer has kept this visual identity for more than 10 years.

In 2009, the rings were slimmed down and the four letters that made up the word Audi were resized and moved to the left side of the emblem. The font was also changed to a traditional font (Figure 12).

Over the years, digitization has started to embrace more and more industries, including the automotive industry. It was precisely for this reason that in 2016, Audi's creative team decided to switch to a minimalist design without any additional elements.

So, the Audi logo now consisted only of the 4 legendary rings, painted in black and with a 2D design.

"A three dimensional object displayed on a 2D display did not meet our technical and aesthetic requirements", explains Audi brand strategist Frederik Kalisch (Figure 13).

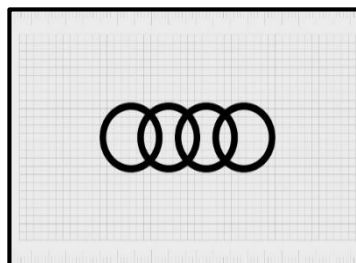


Figure 13: Logo used after 2016 by the German car manufacturer AUDI [9].



Figure 14: The current logo and its visibility on AUDI cars [9].

In other words, the Germans now had a digitally-appropriate logo, which they then decided to put on their cars. The idea was born in 2019, but materialized in 2020.

"We want the four rings to look the same everywhere in the future. Either in a magazine, on a smartphone, on a billboard, on the outside or inside cars," says Audi designer Andre Georgi.

But who better to describe the new logo than its designer Andre Georgi: „We keep it without any chrome, with a contrast of black and white colors. It's as if the white rings are encased in a black glass body for even more sparkle."

All this optical illusion gives you the impression that the Audi logo is still 3D. If you don't like white, the rings can also be ordered in a combination of dark gray and black. With the new logo on the cars, Audi has reduced the number of logos, both inside and out. In addition, it has made a few other changes to the brand identity: the tailgate no longer displays the model version (50, 55 and so on), the emblem and model name are laser engraved on the B-pillar. And only one font will be used: the famous Audi Type.

*"In addition to distracting from the design of our cars, the all-too-visible identifiers probably wouldn't fit with the values of our contemporary and progressive customers either," concludes Frederik Kalisch, Audi brand strategist (Figure 14).*

## **VI. BRAND HISTORY, STORY AND LOGO OF GERMAN CAR MANUFACTURER VOLKSWAGEN**

Volkswagen is a brand founded in 1937 by Adolf Hitler's Nazi party and by the end of the Second World War it could be said to have disappeared completely. The history of Volkswagen, one of the world's best-known car manufacturers, goes back to its beginnings when the company was founded by the German government to produce the first passenger car towards the creation of the legendary Volkswagen Beetle. A Stuttgart-based designer by the name of Ferdinand Porsche turned Hitler's vague ideas into reality in a vehicle that came to be known as the 'people's car'. This was the beginning of the famous Beetle. A huge factory was built at Fallersleben. Inspired by Ford's Rouge River plant, the VW factory was partly sponsored by assets seized from trade unions, and built by workers brought from Italy in a deal between Germany and Mussolini's Italy [5].

In those years, hundreds of thousands of Germans saved money - through a government-backed program - to buy a new car. But because it was impossible to produce a car so cheap that almost anyone could afford it, the German government sponsored this program - a sort of "first car" - which was economically unfeasible, made possible only by the state-controlled system. But after 1939, the outbreak of war meant that the priorities of German industry shifted from car production to war production, and the money saved by the Germans was practically stolen since few Beetle cars were produced before the war. Because of the reluctance of the authorities to put German women to work, the Nazis ended up using a largely foreign labor force - up to 7 million foreign workers in 1943-1944. Around 70% of the workers in the Volkswagen factory were therefore foreigners, prisoners of war or concentration camp inmates, as well as young people - many women and teenage girls - abducted from Nazi-occupied territories. Their treatment in the factory depended on their position on the racial ladder in Hitler's Germany: "Western" workers - Belgians, Dutch or French - therefore enjoyed better conditions than workers from the East - Poles, Russians or Ukrainians.

Living in miserable conditions and poorly fed, the workers were paid wages (except for prisoners in the camps), but these were subject to completely arbitrary deductions by the bosses. In addition, very harsh labor discipline was enforced in the factory by SS guards. Moreover, not infrequently infants born to women brought from the East often starved to death in a home near Ruhen, for which the factory doctor was later convicted and executed by the British.

Ferdinand Porsche himself and his son-in-law, Anton Piech, who ran the factory, were detained after the war by the French for his links with the Nazis' attempt to take control of Peugeot (whose managers ended up in camps). In the end, no official charges were brought against them. After the war, in June 1945, the British took control of the factory (destroyed in bombing raids) and resumed production. No British manufacturer was interested in taking over the plant, arguing that the vehicle - the Beetle - did not meet the basic technical requirements of a car and would be completely unattractive to buyers, and that commercial production of the car would be an economic disaster. In 1948, Ford was offered to take over Volkswagen, but a company leader felt that neither the factory nor the car was worth absolutely nothing. After a few years in which the plant survived by producing cars for the British army, it was returned to the German state in 1948 under former Opel boss Heinrich Nordhoff.

From 1948, Volkswagen became an important element - both economically and symbolically - in the regeneration of the German state. The first cars were sold in the US in 1949, but the real success came in 1950. In just five years, Beetle production increased dramatically, reaching one million cars in 1955.

In 1955, Volkswagen's second model, the Volkswagen Karmann Ghia, a 4-seater coupe sharing the same chassis as the iconic Beetle, was introduced. In 1961, the Volkswagen 1500, also known as the Type 3, debuted as the successor to the Beetle and was introduced as a 2-door sedan. Volkswagen's popularity exploded in the US in the 1960s, thanks to their famous van, the Samba, a model associated with the hippie movement, very popular in the states at the time.

Volkswagen started slowly and between 1964 and 1966 bought Auto Union from Daimler Benz. In the deal, Daimler retained the rights to the Horch brand and the factories in Vitoria (Spain) and Dusseldorf (Germany), while everything else passed to Volkswagen, including rights to the Audi brand from World War II.

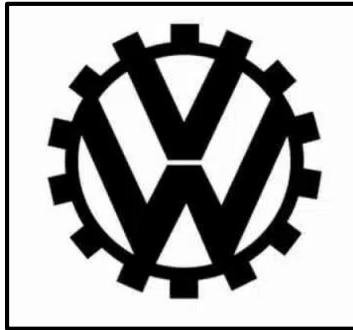
The 1970s saw the first versions of their best-known models: the Golf, Passat and Polo. In 1973 the first version of the Passat with bodywork based on the Audi 80 appeared, designed by Giorgetto Giugiaro. The first

Passat model was a 5-door hatchback, recognized for its large windows, its dashboard being a symbol of the highly practical German car design of the time. In 1974 the first 1.5 diesel-powered Golf model appeared. This car was designed to fit 4-5 people and their luggage and quickly became hugely popular globally, followed a year later by the Volkswagen Polo, the Golf's famous "little brother". The success of the Volkswagen Golf demanded the 1976 launch of the Golf GTI, a performance version of the Golf, which was equipped with fuel injection, a very rare feature in cars of that era.

In 1983, the Golf II appeared, bringing a major improvement in rear seat comfort and the first Volkswagen model to be assembled using robots. In the 1990s, Volkswagen continued to grow, buying other car companies and expanding into new markets such as China. Today, Volkswagen is one of the world's biggest carmakers, with a wide range of models sold worldwide.



**Figure 15: The first Volkswagen logo (1937-1939) [7].**



**Figure 16: Volkswagen automobile logo (after 1939) [7].**



**Figure 17: Volkswagen automobile logo (after 1945) [7].**

Like other automobile brands the Volkswagen automobile logo, both the name and the logo have a very simple history and have undergone many forms over the years. Launched as a company to provide reliable and affordable cars to the general population, the founders put this goal in the brand name, which they called Volkswagen, i.e., "the people's car". The initials of the words Volks and Wagen were also included in the logo of the cars, in a white circle on a blue background. The first logo of this car brand consisted of the two letters V and W, placed one above the other, with a frame representing a cogwheel. It was a rounded graphic interpretation of the swastika symbol, The main element of the VW logo is present in the VW logo to this day and has virtually not changed much since its debut (Figure 15).



**Figure 18: Volkswagen automobile logo (after 1960) [7].**



**Figure 19: Volkswagen automobile logo (after 1967) [7].**



**Figure 20: Volkswagen automobile logo (after 1978) [7].**

The year 1939 marked the first major change to the old Volkswagen logo with the removal of the Nazi symbolism. The gearwheel components remained, along with the central lettering in a circle, This change created the longest-lived logo, which formed the basis for later versions. The symbol became graphically stronger (Figure 16).

In 1945, another update of the original Volkswagen logo appeared, now with more color. The image captured a retro look, with warm colors of cream and brown, paired with the passionate shade of red. The gear design was gone, only the center emblem remained (Figure 17).

In 1960, Volkswagen simplified its image again. A symbol similar to the one used by the organization today was introduced. The square placed around the circular emblem, meant to demonstrate stability as the company began to cooperate in international markets. The monochrome palette of the Volkswagen logo was intended to reflect the stability and strength of the brand as a whole (Figure 18).

After seven years, the square disappeared, restoring the traditional circle in the brand emblem. The design of the new logo was similar to what had existed in 1945, but more minimalist and elegant. The color scheme was changed to blue and white (Figure 19).



**Figure 21: Logo of Volkswagen cars (after 1989) [7].**



**Figure 22: Volkswagen logo (after 2000) [7].**



**Figure 23: Volkswagen car logos (after 2012) [7].**

The shape of the logo was then slightly modified by doubling the frame, the letter V became slightly smaller and more clearly separated from the W. The colors were reversed and looked identical to the logo used today - a white symbol appeared on a blue background (Figure 20).

In 1989, the Volkswagen logo changed again, reverting to a much lighter version of the blue-white color. The proportions were also changed - the logo became lighter and more modern (Figure 21).

In 2000, the evolution of the Volkswagen logo continued as the company sought a more modern image. The changes introduced by Volkswagen involved much use of gradients to make the logo appear more three-dimensional. Thus the white color took on a silvery tint, while the blue became deeper and slightly darker than the previous version (Figure 22).



**Figure 24: Volkswagen car logos (after 2019) [7].**



**Figure 25: Current logo and its visibility on Volkswagen cars [7].**

In 2012, a new version of the logo was introduced, maximizing the 3D effect, although the size of the emblem appeared to be reduced. The lines of the letters look clearer and bolder, which gives the logo a strong and confident look, meant to convey modernism and progress (Figure 23).

In 2019, Volkswagen decided to completely do away with the 3-D aspects of its logo. The image has evolved again into something sleeker and slimmer. The new logo was intended to celebrate the launch of the Volkswagen brand's new electric models. Simple, sophisticated and slightly futuristic, this two-dimensional design is sleek - perfect for a new Volkswagen car nera (Figure 24).

Today's logo is much simpler and more modern, like the minimalist logos seen and realized with today's technology, a modern technology that is used by all commercial vehicle manufacturers worldwide.

Although the image is in many ways similar to the 1960s version, the circle and VW symbol are thinner, and the lower part of the letter W is completely separated from the circle for the first time (Figure 25).

## **VII. BRAND HISTORY, STORY AND LOGO OF GERMAN CAR MANUFACTURER FORD**

Henry Ford changed many people's lives because of the practical and affordable cars he produced. The mobile assembly line and mass production techniques he invented set the standards by which industrial activity would be measured throughout the first half of the 20th century.

The story begins in Springwells Township, Wayne County, Michigan, on July 30, 1863, when William and Mary Ford became parents on the birth of Henry, the first of six children. Growing up on a prosperous family farm, he was educated in a one-room village schoolhouse, and from early on he showed a keen interest in everything mechanical. This interest would develop into a genius and lead Henry to be recognized as 'one of the world's greatest industrialists'. Henry Ford started young. By the age of 12, Henry spent most of his time in a small mechanic's shop, which he had set up himself. Here he built his first steam engine in 1878, when he was just 15.

A year later, he would move to Detroit to work as an apprentice machinist. Ford is always trying to lead the way in technology, from the electric hatch in 1971 to MyKey in 2015. His apprenticeship lasted three years, after which Henry returned to Dearborn. For the next few years, Henry busied himself repairing and operating steam engines, various short-lived jobs in a Detroit factory, and improving machinery used on his father's farm. The year 1888 marked a major decision in his life, that of marrying Clara Bryant; to support his family, Henry took over the management of a local gater.

The next major change was not long in coming: by 1891, Ford was already working as an engineer at the Edison Illuminating Company in Detroit. Two years later, after being promoted to chief engineer, Ford finally had enough time and funds to devote more intensively to his personal experiments with internal combustion engines. Henry Ford built on the basic principles of early pioneers such as Elihu Root, who created an assembly system for the Samuel Colt that divided the manufacturing process into several stages to simplify it. He continued to experiment until each practice was refined and his vision of mass production became a reality.

To reduce dependence on skilled labor, Henry used interchangeable parts that could be easily assembled by unskilled workers. Experiments continued with slides and conveyors. Of course, the location of both people and tools was meticulously analyzed to ensure a production line that operated as efficiently as possible. Each department in the production process was divided into components. These sub-assembly lines were placed in each area until Henry was heard to remark, "Everything in the plant moves." Production speed was increased - in some cases four times as fast. The final step was to create the moving final assembly line. The chassis moved along the line and through each workstation until the complete car rolled off the production line on its own wheels. An essential part of this process was that all the supply lines along the route were synchronized to deliver the right components at the right time. This combination of precision, continuity and speed introduced mass production to the world.

With the Model "T", introduced in 1908, Henry Ford fulfilled his dream of making a reliable, efficient and affordable automobile. This vehicle marked a new era in personal transportation; it was easy to use, maintain and maneuver on rough roads - an instant success. In Highland Park, Model "T" production capacity reached record levels, with a complete car leaving the assembly line every 10 seconds of every workday. Ford was able to cut prices, double the minimum daily wage to \$5, manufacture a superior product and turn a profit.

At the time, Ford was producing two million Model "T" vehicles each year at a price of only \$260. The Model T started a rural revolution. The \$5 a day payment and the philosophy behind it started a social revolution. The furniture assembly line started an industrial revolution.

Things were moving fast. In 1919, Henry and his son Edsel purchased the entire minority stock of \$105,568,858, making them the owners of the company. Edsel, who took over as President from his father that year, continued in that position until his death in 1943, when Henry Ford returned to the helm.

Henry Ford resigned for the second time as president of the Ford Motor Company in September 1945, succeeded by his grandson, Henry Ford II. The following year, Henry was honored at the Golden Jubilee of the American Automobile Industry for his major contribution to the automobile industry, and later that year the American Petroleum Institute presented him with its first Gold Medal for outstanding contribution to the welfare of mankind. Henry Ford died at his Fairlane residence in Dearborn on April 7, 1947, at 11:40 pm. He was 83 years old. At the time of his death, flooding from the Rouge River caused a power outage in the area. With kerosene lamps and lighted candles, the scene must have been similar to his birth 83 years ago.

The Ford oval logo is one of the world's most recognizable symbols and has been in regular use for over 50 years. But the oval hasn't been used since the company's inception - here's how the Ford logo has evolved over the years.

The logo was first used in communication in early 1903. The first mass-produced car, the Model A, received special treatment - Ford's first car logo had a "on-trend" look with art nouveau influences (Figure 26).



In 1906, a more elaborate form of the logo appeared with stylized lettering of the letters "F" and "D" - known as the "winged logo". This logo was used on all Ford cars until the end of 1910, when the text was revised again in the form that is still in use today. The trademark was registered with the United States Patent Office in 1909 (Figure 27).

The first oval was originally used by Ford Motor Company Limited of the UK in 1907. This oval logo was used to advertise the Ford brand as a "hallmark of reliability and economy". It was later adopted by the Ford Motor Company (Figure 28).

By combining the oval with stylized script letters, Ford created the definitive logo in 1911. Ford vehicles and company communications continued to use stylized lettering until the late 1920s (Figure 29).



**Figure 26: The first Ford logo (1903) [10].**



**Figure 27: Ford logo (1906) [10].**



**Figure 28: Ford logo (1907) [10].**



**Figure 29: Ford logo (1911) [10].**

For a short time, Ford moved away from the oval design and used a winged triangle design on their cars (1912). Designed to symbolize speed, lightness, grace and stability, the logo was produced in orange or dark blue and bore the words "The Universal Car". Henry Ford did not like the design and quickly stopped production of the logo (Figure 30).

The new Model A was the first Ford vehicle to place the oval Ford logo on the radiator grille (1927). With the familiar royal blue background that we still recognize today, the logo was used on most cars until the late 50s. The blue oval then disappeared from the hoods and grilles of Ford cars until the mid-1970s, replaced by the word "Ford". Although the oval Ford logo was constantly used in company communications during this period (Figure 31).



**Figure 30: Ford logo (1912) [10].**



**Figure 31: Ford logo (1927) [10].**



**Figure 32: The Ford logo 1976 - present and its visibility [10].**

From 1976, all Ford cars began to carry, as a symbol of identification, the oval Ford logo colored in blue and silver, thus providing a more recognizable brand worldwide (Figure 32).

## **VIII. CONCLUSIONS AND PRESENTATION BY THE AUTORS OF SOME UNKNOWN ASPECTS ABOUT THE CAR BRANDS PRESENTED**

When you say German quality, you think the best. And so it is with the colossus Audi, one of the world's most popular car manufacturers. A top brand in the German industry, Audi forms, alongside Mercedes and BMW, an unbeatable trio of cars that win through performance and cutting-edge technology.

The color on the BMW (Bayerische Motoren Werke - Bavarian Motor Works) emblem symbolizes the color of the blue sky. This is due to the fact that in its early days the factory built engines for German military airplanes in World War II. BMW's circular blue and white symbol represents the colors of the state of Bavaria, the company's birthplace.

BMW has always been a pioneer of innovation in engine technology. In the 1970s, the company developed the first mass-produced in-line six-cylinder engine, the "M30". This was followed by the V12 engine, introduced in the 1980s, which powered the famous BMW 7 Series.

BMW's M division, founded in 1972, is responsible for creating some of the brand's most high-performance and exclusive models. The M-Series represents the pinnacle of performance, technology and design, and the M3, M5 and M6 models have become true legends in the world of sports cars.

In recent years, BMW has actively invested in developing environmentally friendly and sustainable solutions for the future of transportation. The launch of the BMWi in 2011 was a major step in this direction, with models such as the i3, the company's first electric vehicle, and the i8, a hybrid supercar with impressive

performance. BMW continues to innovate and develop new electric and hybrid models, preparing for a full transition to electric mobility.

BMW is recognized for implementing advanced safety and driver assistance technologies in its models. The company was a pioneer in the use of anti-lock braking systems (ABS) and traction control systems (DSC). Today, BMW offers a wide range of driver assistance systems such as parking assistance, lane departure warning and adaptive cruise control. BMW has contributed significantly to the evolution of the automotive industry, inspiring other companies and offering unrivaled driving experiences to drivers around the world. As we move towards a future where electric and autonomous mobility will become increasingly important, we can be sure that BMW will continue to play a crucial role in the development of these technologies and surprise us with exciting new models and innovations.

The three cornered star on the Mercedes Benz logo first appeared in 1909 on a Daimler in 1926, with the laurel wreath representing the union with Benz being added. The current logo, the star in a circle, was first used in 1937.

Mercedes-Benz has one inspector for every 11 workers. Inspectors thoroughly check every action the employees take, so each model has gone through thousands of separate inspections before being approved for sale.

All chrome elements on Mercedes-Benz models are created by plating with two layers of copper, over which a nickel layer is applied. These are then plated with chrome.

The seats in Mercedes-Benz cars are designed with the help of orthopedic specialists. They provide the necessary support for the knees, kidneys and back. In addition, the springs of the seats in classic Mercedes-Benz models have been designed in line with those used in the suspension to avoid the little 'wiggles' that lead to muscle fatigue and discomfort.

The first production car with a diesel engine was the Mercedes-Benz 260D, launched in 1936.

Mercedes made a number of safety innovations which it shared with other car manufacturers around the world to improve the safety of road transportation. These innovations include ABS and ESP systems, airbags, pretensioner belts and traction control.

Mercedes created the first models with "safety cage" and controlled crumple zones in 1951. Although the technology has evolved over time, the principle of controlled crumple zones has remained the same - the absorption of the force generated on impact.

Mercedes signed an alliance with the American manufacturer Studebaker-Packard in 1958. Under this alliance, Mercedes could use the manufacturer's overseas distribution network. Studebaker went bankrupt in 1963, at which point the former Studebaker dealerships began delivering only Mercedes-Benz models.

Mercedes created two experimental models with the Wankel engine. These were code-named C111 and were created in 1969 and 1971. Following the tests, Mercedes decided to concentrate on the development of diesel engines.

The Mercedes-Benz models became known in Formula 1 as the "silver arrows" following a competition rule that specified the maximum weight a model could carry. Because the Mercedes cars exceeded the maximum by several kilograms, engineers decided to 'shave' the paint from the bodywork to reduce the weight of the cars so they could compete. The models were able to compete and win that race, the silver color of the metal later becoming a symbol and being used in many other competitions.

Mercedes is present in musical culture through a song sung acappella by Janis Joplin.

The four rings that make up the Audi logo represent the four companies in the Auto -Union consortium of 1932. They were DKW, Horch, Wanderer and Audi. After the Second World War, the name Audi, which loosely translated from Latin means "to hear", disappeared, but in 1965 it reappeared again, using the four rings as its logo. The name Audi is also the Latinized version of Horch, which also means "to hear" in German.

Audi arrived in Ingolstadt in 1949, after the Russians had demolished all the Auto Union plants following the war.

Auto Union was owned for 6 years by Daimler (1958-1964). Volkswagen later bought the company and renamed it Audi.

In 1997 Audi was the first European manufacturer to launch a hybrid model on the market: the A4 Avant. The first Audi models were named according to the power developed by their engines. The Audi 50, Audi 80 and Audi Super 90.

Quattro is a name registered by Audi and used to name the all-wheel drive technology or systems on its models. The name debuted in 1980.

Audi is the first car manufacturer to organize a crash test. It happened in 1938.

The Audi R8, the most aggressive model in the current range, is "filled" with leather inside. The number of stitches is exactly 36,520. The figure is identical in every single example.

Audi brand cars, apart from the two German plants in Ingolstadt and Neckarsulm, are also manufactured in Győr (Hungary), Bratislava (Slovakia), Changchun (China), Brussels (Belgium) and Aurangabad (India).

Audi's official slogan is *Vorsprung durch Technik* ("Progress through Technology"). This slogan was first used in an advertisement for the NSU Ro 80 in January 1971. The slogan is also used in the songs "Zooropa" by U2 and the album "Parklife" by Blur.

Audi was the first German manufacturer to make a left-hand drive car. It happened in 1921 and was called the Type. Up until then, in all German models, the driver was in the center position.

The history of Volkswagen is a history of success, from the first KdF-Wagen model to the modern models sold today, and Volkswagen has a complex and rich history, keeping the concept of being a car manufacturer for all budgets from the very beginning.

Harold Wills, Henry Ford's right-hand man, had made money in his youth printing business cards, and when Henry was looking for a logo for his automobile brand in 1903, Wils came up with an answer for Ford. The typeface on the Ford logo is identical to the one Wils used on his business cards. The oval inscribed with the word Ford appeared in 1912 and the blue background in 1927 with the launch of the Model „A”.

Henry Ford worked for Thomas Edison and left his company in 1899, after convincing a few investors to form the Detroit Auto Company. The American had already created an experimental four-wheeled vehicle, which he had been driving on the streets of Detroit since 1896. Unfortunately for Henry Ford, his new venture was unsuccessful and Ford found himself on the road with no source of income. For lack of options, he was forced to move back to his father's house with his wife and child. Once back at home, Ford became ambitious and raced Alexander Winton in an automobile, attracting the attention of investors to form the Henry Ford Company.

In 1921, the Ford Motor Company dominated automobile production in the United States, manufacturing 55% of all American cars. That same year, the 5,000,000th Ford was built.

Like any automobile manufacturer with history, Ford supported his country's effort in the World War. From 1941, Ford produced B-24 bombers at its Willow Run plant and troop carriers at its Dearborn factory.

Once the company was formed under his name, Henry Ford retired a year later because of differences between himself and the management. On August 22, 1902, that company changed its name to Cadillac Automobile Company. A year later, Ford Motor

Starting in 1903, Henry Ford began production of his first automobiles. The company founder decided that the first models would be named in alphabetical order, the most popular of which was the Model T, assembled between 1908 and 1927. It was so successful that in its almost 20 years of existence, 16.5 million cars were delivered in the United States. The price Henry Ford charged for the Model T was affordable, even for the workers at his own plant. The company was founded by the Malcomson group.

Henry Ford realized that he needed a more efficient way to mass-produce cars in order to reduce their price. Ford studied other heavy industries and saw four principles he needed to follow to achieve his goal. These were: interchangeable parts, a continuous flow of cars and parts, division of labor, and reduction of wasted effort. Ford gradually put the four principles together over five years and created the world's first widely used assembly line in 1913. Some say Henry Ford got the idea for a car assembly line from a process that was used in the 1800s to butcher hogs.

In 1965, Ford introduced the Transit model to the European market, recorded as the first model with a similar design on the two continents of Europe and America. Ford's first Sport Utility Vehicle was introduced a year later to the American market, the Bronco. It wasn't until 1967 that Ford Europe was established.

Ford owned a 25% stake in Toyo Kogyo in Japan (1969), which was renamed Mazda.

Ford owned Jaguar, Land Rover, Volvo Cars and TH!NK at the same time. Jaguar was acquired in 1989, and Volvo and TH!NK in 1999. The Land Rover brand was bought from BMW in 2000. In the 1960s, Henry Ford even tried to buy Ferrari, but negotiations with Enzo Ferrari didn't go in Henry Ford's favor, so he gave up the idea.

All Ford Model "T" models were painted black. This color was chosen because it dries faster than any other shade, which implicitly helped increase production. In his autobiography, Henry Ford wrote: "Any customer can order a Model "T" in any color they want, as long as it is black." The explanation for why black paint dries faster is logical - black absorbs more light than a color and can turn it into heat faster, which helps the solvents in the paint evaporate.

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