

Mercedes-Benz

Digital skills and
research methods
BMSW4003

Student Name	Student ID	Topic
1. Alina Cocirlea	2123036	Background of the organization
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3.Cezar Stroescu	2123047	Insights of Modern Technology Introduced
4. Alexandra Cozma	2125169	Impacts of Modern Technology
5. Mihai Cozma	2125171	Lessons drawn from the case study

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BACKGROUND OF THE ORGANISATION

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Introduction



Source: (Obi, 2019)

- Mercedes Benz Group is a leader in the automotive industry
- Sells luxury and premium cars
- Delivers different kind of services
- The company invests in development
- Sustainability is one of the company's main goals
- (Mercedes- Benz Group, 2022)

- 1926: Mercedes company starts its journey (Autocar, 2022)
- 1885: Mercedes produces the first motorcycle in the world (Scoble, 2020)
- 1886: The company introduces the first automobile to the world (Nuttall, 2021)
- 1936: Mercedes Benz introduces to the world the first diesel passenger car (Nuttall, 2021)
- 1990: Mercedes removes the CFC chemicals that were harmful for the environment (Disiere, 2019)

Background of Mercedes Benz

History of Mercedes Benz



Source: (Parker, 2017)



Source: (Chiesurin, 2021)



Source: (Rosen, 2021)



Source: (Rivera, 2021)

Background of Mercedes Benz Aims and Objectives of Mercedes Benz

- **Get oriented to Autonomous vehicles (Al Root, 2021)**
- **Produce more electric cars (ET Auto, 2022)**
- **CASE - Connected, Autonomous, Shared Services (Mercedes-Benz USA, 2022)**
- **Develop more advanced driver assist systems (Sigal, 2022)**



Background of Mercedes Benz

Scope and Purposes of Mercedes Benz

- Get close to customer's heart
- Develop the relationship with their employees
- Follow the “Ambition to lead” (Schubach, 2021)

Mission

Creating an exceptional place to work (Visionary Team, 2022)

The perfect environment to do business (Visionary Team, 2022)

Get satisfaction for the customers (Comparably, 2022)

Background of Mercedes Benz

&

Vision

Make improvements regarding the automotive design (Visionary Team, 2022)

Personalized customer care (Comparably, 2022)

Transparency (Comparably, 2022)



Source: (Hoenhorst, 2019)

Background of Mercedes Benz

Current status of Mercedes Benz



Source: (Costello, 2019)

- Introducing the first ICE tricycle in 2022
- The new EQ electric vehicles releases
- AMG will contribute to make EQ vehicles more performant (Duffer, 2021)

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**CHALLENGES BEFORE INTRODUCING MODERN
TECHNOLOGY**

Challenges before the introduction of Modern Technology



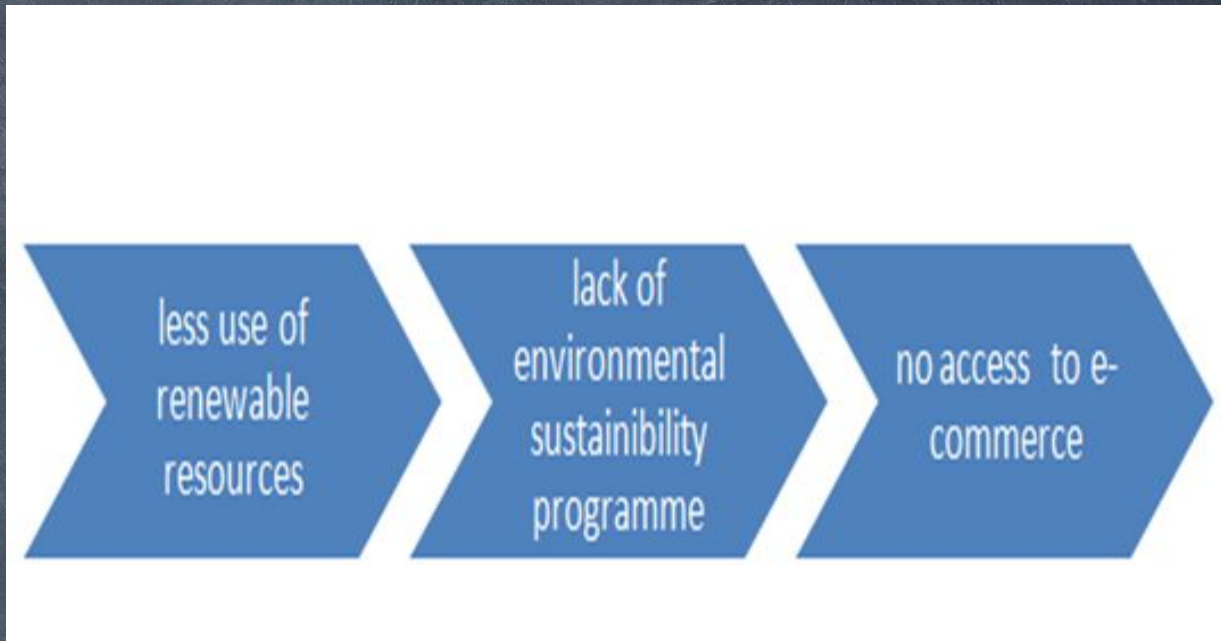
Lack of utility of renewable resources as fuel to drive the vehicles



Lack of access to environmental sustainability (Auto.economic times, 2022)



No access to e-commerce business module during a pandemic



Challenges before the introduction of Modern Technology

Contd.



The brand was having an issue with safety and reliability (Auto.economic times, 2022)



Lack affordability in financial aspect to incorporate digitalisation



The issue with the availability of resources to promote automobile

Challenges before the introduction of modern technology

The First Car 1886



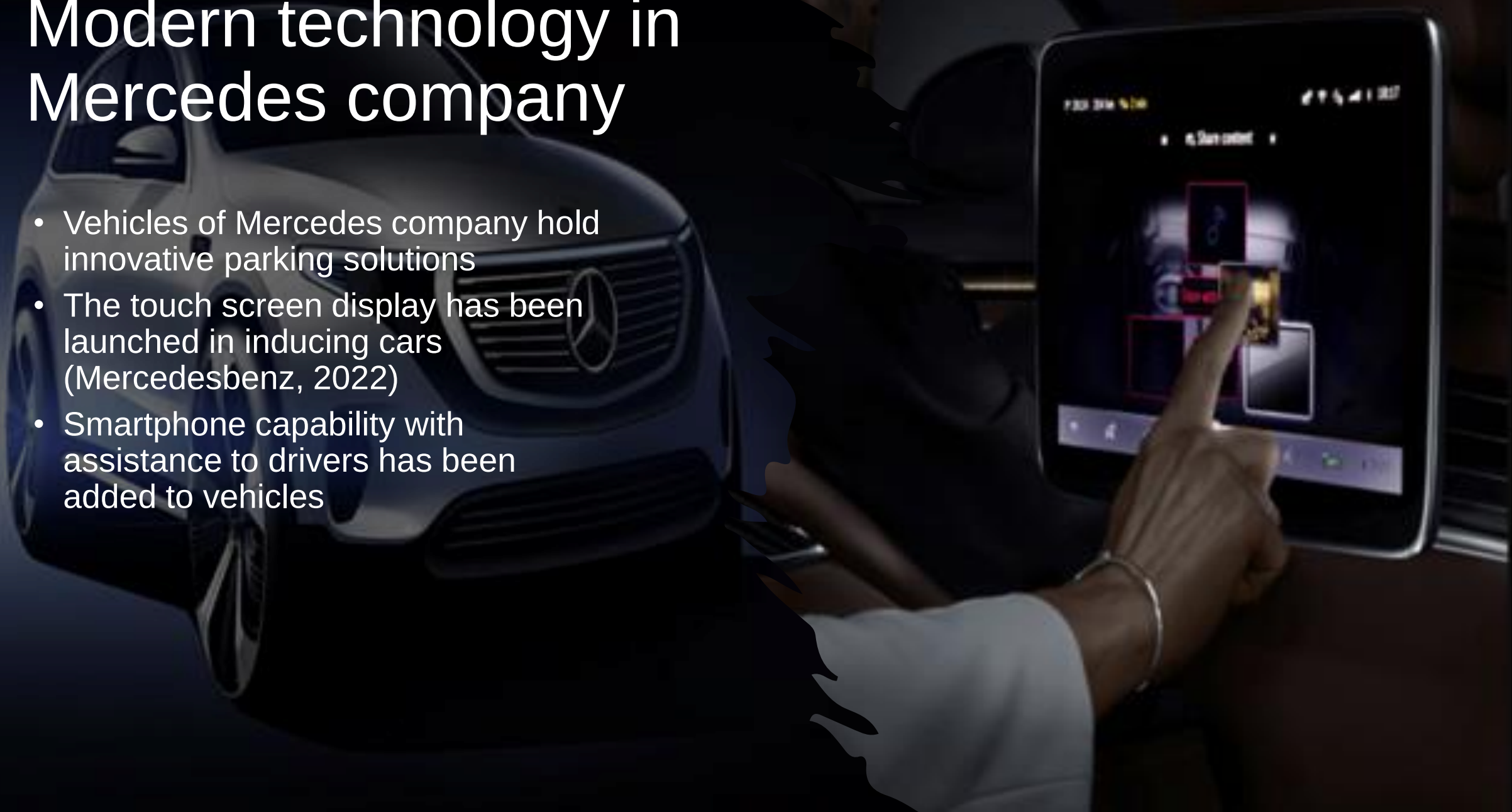
- With a rear-mounted single-cylinder engine, the first automobile forever changes the way people move, and sparks a legacy of innovation that continues to this day.



- Mercedes-Benz to launch all-new electric vehicle before 2020 Mercedes-Benz has showcased its plans for a completely new electric vehicle (EV) architecture that will underpin its upcoming range of pure EVs set to go on sale before the end of this decade.

Modern technology in Mercedes company

- Vehicles of Mercedes company hold innovative parking solutions
- The touch screen display has been launched in inducing cars (Mercedesbenz, 2022)
- Smartphone capability with assistance to drivers has been added to vehicles



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**INSIGHTS OF THE MODERN TECHNOLOGY
INTRODUCED**

Source: (Szymokowski, 2017)



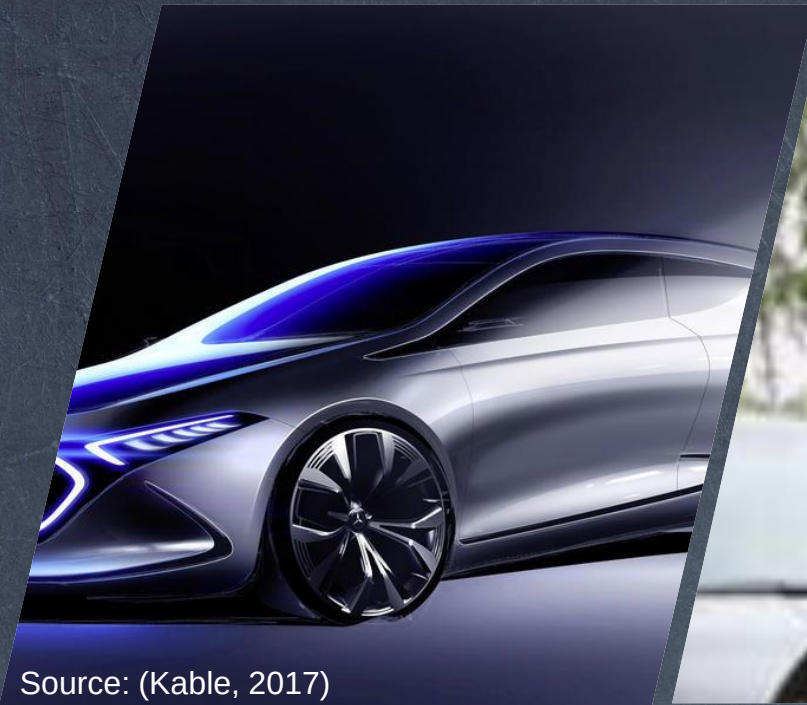
Insights to the modern technology

Mercedes Benz EQC - electric car

Definition and Characteristics of the Electric car



- Electric cars are fully automatic vehicles (Windsor Motors, 2021)
- EQC by Mercedes is a fully electric SUV car (Times of India, 2020)
- EQC has crisp acceleration (Times of India, 2020)
- The EQC SUV is having 5 seats and an unique design in order to align to the luxury buyers (Times of India, 2020)



Source: (Kable, 2017)



Source: (Ashish, 2020)

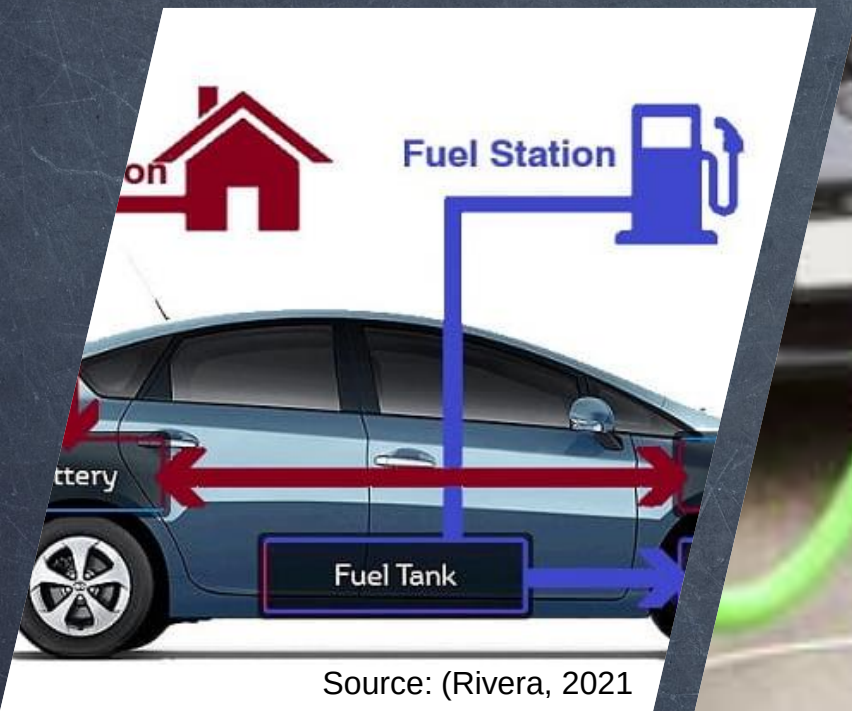
Insights to the modern technology

Mercedes Benz EQC

Electric car

Models of electric cars

- **All-Electric Vehicles (EV go, 2021)**
- **Plug-In Hybrid Electric Vehicles (Riswick, 2019)**
- **Fuel Cell Electric Vehicles (Union of Concerned Scientists, 2015)**



Source: (Rivera, 2021)

Advantages

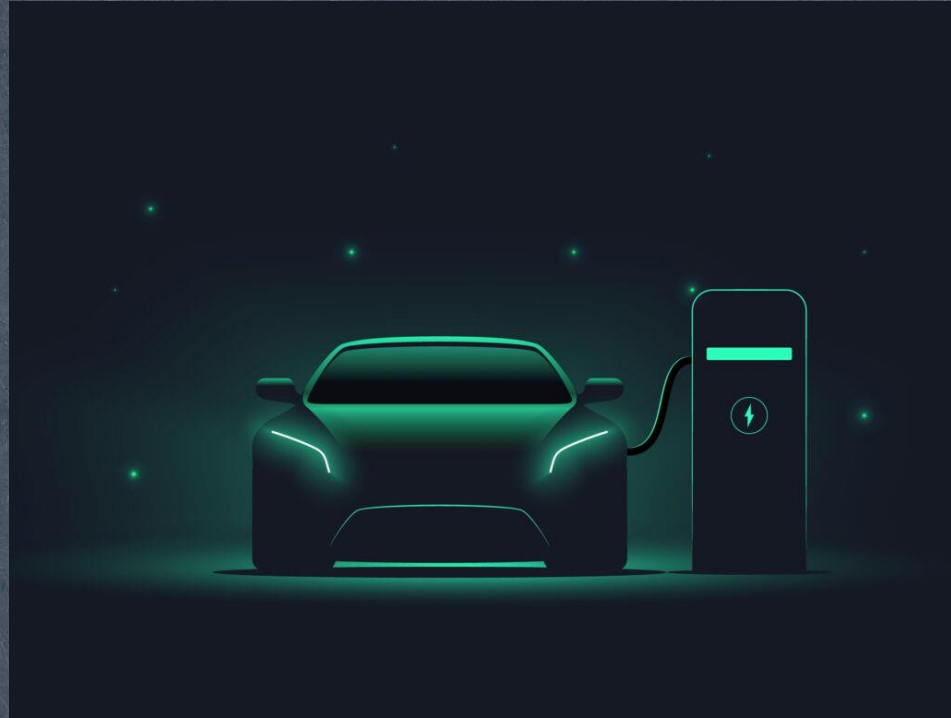
&

Disadvantages

They are energy efficient (Gelmanova et al., 2018)

Electric cars reduce carbon emissions (Gibson, 2020)

Provide high performance and less maintenance (HiQ, 2021)



Source: (Skidmore, 2021)

Electric cars allow less travelling due to the reduced range (Dredge, 2017)

It takes time to recharge (Gelmanova et al., 2018)

EV's are expensive (Schoeps, 2021)

Insights to the modern technology

Importance of EQC and
electric cars



Source: (Unilever, 2017)

- Improve air quality in cities
- Reduce noise pollution
- Reduce carbon emissions
- Do not harm the environment
(EDF, 2021)

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IMPACT OF THE MODERN TECHNOLOGY

- Are better for the environment
- Emit less greenhouse gases than fuel-based engine cars
- Improve the quality of air (EDF, 2021)

Impact of Modern Technology

Positive Impacts of Electric cars



Source: (Invest Ontario, 2021)

- Reduction in different kind of harmful emissions
- Reusing and recycling the batteries
- Their manufacturing process is less harmful for the environment (Pagar, 2021)

Impact of Modern Technology

Positive Impacts of Electric cars



Impact of Modern Technology

Negative Impacts of Electric cars



- **Contribute to Global warming**
- **Battery production uses toxic substances**
- **Acidification**
(BBC News, 2012)

Impact of Modern Technology

Negative Impacts of Electric cars



Source: (Winters, 2021)

- Human and ecosystem toxicity
- Leads to acid rain
- Depletion of fossil fuel (YPTE, 2021)

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**LESSONS DRAWN FROM THE CASE
STUDY**

Lessons Drawn from the case study

Differences between modern and traditional technology

GASOLINE VEHICLE	FUNCTION	ELECTRIC VEHICLE
Gasoline Tank	Stores the energy to run the vehicle	Battery
Gasoline Pump	Replaces the energy to run the vehicle	Charger
Gasoline Engine	Provides the force to move the vehicle	Electric Motor
Carburetor	Controls Acceleration and speed	Controller
Alternator	Provides Power to accessories	DC/DC converter
	Converts DC to AC to power AC motor	DC/AC converter
Smog Controls	Lowers the toxicity of exhaust gasses	

Source: (Sutty, 2022)



Lessons Drawn from the case study

Importance of electric cars in Mercedes Benz

- Sustainability
- Develop electric drive technology
- Future cells and modules will be developed within the company
- Mercedes will make new partnerships that will benefit the business (Fleet Forward, 2021)



Source: (Rivera, 2021)

Lessons Drawn from the case study

Consequences of not using modern technology



- People will buy less fuel engine cars due to the fuel raising prices (BBC, 2022)
- Electric cars will have more demand than traditional engine cars (BBC, 2022)
- Customer will get oriented to electric vehicles due to high tax rates (BuyCar Team, 2022)

- 
- Mercedes company will focus on finding new growth opportunities
 - Mercedes is planning to go all-electric
 - Adopts sustainable projects
 - The company is planning to invest money to expand their product portfolio
 - (Mercedes-Benz, 2021)

Lessons Drawn from the case study

Future prospect

Conclusion

- Mercedes company adapts to global changes easily
- The company is involving in numerous sustainability projects
- Mercedes Benz creates and develops the business to fulfill the customer's requirements

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THANK YOU

A group of hands holding up large red letters spelling 'THANK YOU' against a white background. The letters are made of a thick, matte red material. The hands are of various skin tones and are positioned below the letters, holding them from underneath. The background is a solid white rectangle, which is set against a dark blue background with a lighter blue geometric shape in the top right corner.