<u> Міжнародна студентська науково - технічна конференція</u> "ПРИРОДНИЧІ ТА ГУМАНІТАРНІ НАУКИ. АКТУАЛЬНІ ПИТАННЯ"

УДК 621.313

Шевченко Л. – ст. гр. БОА-15

Київський національний університет технологій і дизайну

TESLA INC

Науковий керівник: Звонок О. А.

Shevchenko L. *Kyiv National University of Technologies and Design*

TESLA INC

Supervisor: Zvonok O.

Ключові слова: Тесла, компанія, електромобіль.

Keywords: Tesla, company, electric car.

Tesla Inc. (before February 1, 2017 - Tesla Motors) is an American automotive startup company from the Silicon Valley.

Focused on the design, manufacture and sale of electric vehicles and components to them. Named after the world-renowned electrical engineering and physicist Never Tesla.

Among the investors of the company are Google founders Larry Page and Sergey Brin, as well as one of the founders of the PayPal payment system, Ilon Mask.

General information:

Tesla is named after the electrical engineer and physicist Nikola Tesla. The Roadster Tesla uses an AC motor, which originates directly from the project of Tesla himself in 1882 [1].

Tesla Roadster, the company's first car, is the first serial car that uses lithium-ion rechargeable batteries and the first serial electric car with a stroke of over 200 miles (320 km) per charge. The sports model accelerates from 0 to 60 mph (97 km / h) in 3.7 seconds and, according to the environmental analysis of Tesla Motors, is twice as efficient as the Toyota Prius. From 2008 to March 2012, Tesla Motors sold over 2,250 roadsters in 31 countries.

Tesla Motors introduced the fully electric Tesla Model S sedan on March 26, 2009. Model S is manufactured at the Tesla plant in Fremont, California, the former assembly plant NUMMI, now a non-existing joint venture between Toyota and General Motors [2].

At present, Tesla Inc. employs around 12,000 full-time employees, and the company employs staff at its headquarters in Palo Alto, California, at its European headquarters in Maidenhead, UK, and places of sale across North America and Europe, whose number is constantly increasing.

In 2016, 83 922 cars were manufactured, but 6450 cars were not "physically" received by customers due to various delays in transport. Also, the number of orders for popular models – Model S and Model X – has increased by 52% for the 4th quarter of 2015 and by 24% for the previous record third quarter of 2016 [3].

Sales:

Tesla global sales passed 250,000 units in September 2017 and its 300,000th vehicle was produced in February 2018 Its top selling car is the Model S, with global sales of about 212,874 units between June 2012 and December 2017, followed by the Model X with about 72,059 units sold between September 2015 and December 2017. Model 3 deliveries totaled 1,764 units in 2017. The now-retired Roadster sold about 2,450 units. In July 2017, Tesla said their vehicles had traveled 5 billion mi (8 billion km). In 2016 BYD Auto was the world's top

<u> Міжнародна студентська науково - технічна конференція</u> "ПРИРОДНИЧІ ТА ГУМАНІТАРНІ НАУКИ. АКТУАЛЬНІ ПИТАННЯ"

selling plug-in car manufacturer with 101,183 units sold, followed by Tesla with 76,243.] However, Tesla revenues ranked ahead with US\$6.35 billion, while BYD notched US\$3.88 billion. Also in 2016, the company sold US\$1 billion worth of cars in China, the world's largest market for electric vehicles, and in October of the following year it reached an agreement with the Chinese government to build a factory in Shanghai. As of October 2016, Tesla operated about 260 galleries or retail locations in the United States. In June 2016, Tesla opened its first store-within-a-store: a small outpost within the Nordstrom's department store at The Grove shopping mall in Los Angeles. In 2017, Tesla opened retail locations in Dubai and South Korea. In August 2015, Tesla launched a revamp of its stores to include interactive displays focused on safety, autopilot, charging network and motors. In 2017 Tesla had a US \$52 million marketing budget and used a referral program and word of mouth to attract buyers.

Tesla Supercharger network:

Tesla is expanding its network of recharging stations called Supercharger. The stations were designed to allow the Model S sedans to make long journeys. The company plans to cover high-traffic transport corridors in the continental United States. Construction of these stations in Europe and Asia is planned for the second half of 2013. According to Ilona Mask, it is expected that "the entire territory of the United States will be covered by the end of next year", while owners of Tesla cars will be able to use these stations for free at all times.

By mid-2016, the network accounted for more than 600 stations, most of them in the United States [4].

In June 2017, at a meeting with shareholders, Ilon Mask promised to bring the number of Supercharger stations to 10,000 by the end of 2017.

An interesting fact:

The company quickly grew and recruited staff and in 2017 faced the problem of parking cars near their offices, so at the factory in Fremont, 6,000 employees, and only 4500 parking spaces; Ilon Mask promised to make roller coasters to deliver workers to factory jobs [5].

As of June 2017, the company worked as a Ukrainian architect Alexei Ilyashov as chief data architect.

From the end of 2016, a vegan salon is available for order; this option is available for all models of the company.

In September 2017, Ion Mask believed that for a hundred days Tesla will build in Australia the so-called Tesla's largest 100 MW battery, which will save electricity from wind turbines. Mask won.

References:

- 1. Tesla drops 'Motors' from name as CEO Musk looks beyond cars
- 2. Google Finance: Tesla Motors Inc
- 3. Andrew J. Hawkins. Tesla delivered over 76,000 vehicles in 2016, falling slightly short of goal. The Verge. 2017-01-03.
- 4. Tesla launches first six Supercharger locations; 100 kW charging, with 120 kW in future. 2012-09-25.
- 5. At Tesla's Party, Superchargers and Delivery Dates. 2012-09-25.