

A GLIMPSE INTO THE FUTURE

the idea of progress

places and forms of power

myths and heroes

spaces and exchanges

IS ELON MUSK BUILDING THE FUTURE?

10 ways elon musk is changing the future

10. SUPERSONIC TRAVEL

Unveiled by Musk in 2013, the super-fast Hyperloop travel concept is potentially revolutionary. The transportation system will apparently blast passenger-packed 2 meter wide pods through long tubes at about 1,220 km/h using energy derived from the sun. These pods would zoom through long tubes, which would be mounted on pylons to minimize construction costs, reduce earthquake risk and ease right-of-way issues. Musk believes the system will act as a cheaper, faster alternative to California's proposed \$70 billion high-speed rail system, estimating that a Hyperloop line could be built from Los Angeles to San Francisco for \$6 billion or so. Despite some scientists being skeptical about whether the Hyperloop will work, it has the potential to be completely world changing for travel. Take for instance the journey time from LA to San Francisco, typically in a car it takes 6 hours, but via the Hyperloop it would take just 30 minutes.



population on Mars for the long-term future of humanity. The billionaire entrepreneur hopes SpaceX can help get the ball rolling toward such a settlement by ferrying explorers to the Red Planet for perhaps \$500,000 per trip. Musk envisions 1,000 huge advanced carbon fibre ITS spaceships sitting in orbit at any one time - "kind of like Battlestar Galactica". They would be refuelled using propellant tankers, and be capable of holding 100 crew - though this number would ideally rise to 200. Each ship is expected to have a lifespan of 30 years and 15 flights each. If the crew number onboard stays at 100, 10,000 trips will be needed to populate Mars, said Musk. Due to the time limitations on this, his estimate came to a mission length of 40 to 100 years to reach the necessary population.



7. MAKING ELECTRIC CARS COOL

When many of us think of Elon Musk, we think of Tesla, the company he founded in 2003 that manufactures electric cars and the battery packs that power them. By creating models that were visually much more desirable and affordable to the average customer, Musk has helped change the way many people view electric cars. In 2015 and 2016, the company's Model S was the world's best-selling plug-in electric car and global sales of the car reached the 200,000 unit milestone during the fourth quarter of 2017. Tesla's success pushed other major car manufacturers towards developing their own electric vehicles, such as the Renault ZOE, BMW i3 and Nissan Leaf. By 2040, analysts now say that 54 percent of all cars sold on the planet will be electric. And if things go the way they have in 2017, those cars are more likely to be emblazoned with a Tesla Inc. logo than BMW AG's.

9. PRIVATE SPACEFLIGHT

Musk founded the private spaceflight firm SpaceX in 2002, and currently serves as its CEO and chief designer. SpaceX has already made history, becoming the first private company to deliver a spacecraft to the International Space Station. The unmanned Dragon capsule first visited the orbiting lab on a demonstration mission in May 2012, and has completed two cargo runs since. The company holds a \$1.6 billion contract with NASA to make 12 such flights with Dragon and its Falcon 9 rocket. In 2017, Musk revealed proposals for one of his most ambitious projects to date- intercontinental rocket flights for passengers that will take under half an hour and cost roughly the equivalent of an economy flight on a passenger jet. SpaceX claimed that it would be able to fly from Hong Kong to Singapore in 22 minutes, New York to London in 29 minutes, and Sydney to London in 51 minutes.

8. COLONIZING MARS

Beyond intercontinental rocket flights, in the next 40 to 100 years, Elon Musk hopes to build a one-million-strong



A GLIMPSE INTO THE FUTURE



6. THE GIGAFACTORY

What do you do when your electric car company's business plan requires more lithium ion batteries than the entire world produces? If you're Elon Musk, the answer is to create a giant "Gigafactory" that meets your own demands. The estimated cost of the factory is five billion dollars. Tesla is only worth just over three billion. That's a bit of a funding gap. Musk got around this problem by inciting a bidding war between states who want to host the Gigafactory, which is estimated to create 22,000 new jobs and bring 100 billion dollars into the local economy over the next 20 years. The state of Nevada won with its offer of 1.4 billion in incentives, plus free land to build the Gigafactory on. The Gigafactory is capable of making 10,000 solar panels a day, or one gigawatt of solar capacity a year. It will be the largest solar manufacturing plant in North America and one of the biggest in the world, easily becoming one of the biggest providers of alternative energy sources.

5. PIONEERING E-COMMERCE

Most of you have probably bought something online using PayPal. The payment system makes it quick and easy to make a transaction, and we have Musk to thank for its success in revolutionising online payments. The story goes that Elon Musk co-founded the online financial services company X.com in 1999. A year later, X.com merged with Confinity, which had developed an online payment system called PayPal. In 2001, the company was renamed PayPal and dramatically grew in popularity, so much so that it was acquired by eBay in October 2002 for a whopping \$1.5 billion. Up until the acquisition, eBay depended on physical cheques as payment. As of 2017, PayPal operates in 202 markets and has 218 million active, registered accounts. PayPal allows customers to send, receive and hold funds in 25 currencies worldwide.



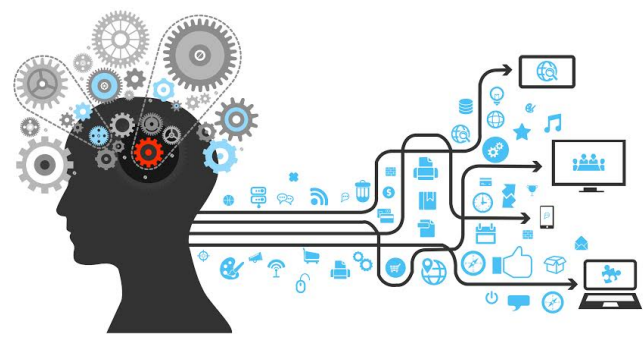
4. RENEWABLE ENERGY

By now you've probably realised Elon Musk has a vested interest in the effects of climate change, so it makes sense that he's involved with a big renewable-energy venture. Musk is the chairman of SolarCity, which designs and installs clean energy systems for households, businesses, universities and other organizations. SolarCity claims its carbon footprint per unit of energy production is 95% lower than that of fossil fuel power plants and the typical SolarCity system starts delivering net carbon reductions in less than a year. The firm, which was founded in 2006, has thousands of customers across 14 states, according to its website. Musk's goal is to provide consumers with an integrated fossil free future. His solar-powered roof tiles eliminate the need for traditional panels and have a longer-lasting home battery, which Tesla calls the Powerwall.



3. THE FUTURE OF AI

When it comes to Artificial Intelligence, Elon Musk is extremely worried about the potential threat it could have on humanity. In fact, he's so worried that he pledged \$1 billion in 2015 to create a non-profit organisation called OpenAI, which researches ways that we can peacefully coexist with machines. The Tesla founder fears international competition for AI could lead to World War III, believing that one of the AIs developed in the technological arms race could actually launch the triggering attack, if it determines for itself that doing so is the best probably path towards becoming the clear global leader. However, despite his reluctance to get on board with AI, in February 2018 Musk left OpenAI's board due to a conflict of interest with Tesla's own autonomous driving AI effort. Nonetheless, he has stated that he will continue to donate to and advise the organization to pre-emptively safeguard the world from the AI threat.



2. REUSABLE ROCKETS

If you've been keeping up with what Elon Musk has been doing recently, you'll know that on February 6 2018, his aerospace company, SpaceX, successfully launched his cherry-red Tesla Roadster into space. Of course it was the Tesla that grabbed the headlines, but the real success of the publicity stunt was the partially reusable Falcon Heavy launch vehicle

A GLIMPSE INTO THE FUTURE

which is essentially three Falcon 9 rockets strapped together that successfully landed its two outer stages in beautiful synchronisation. For years SpaceX has been creating reusable booster rockets that once used up, can descend to Earth in a controlled drop, before landing vertically on land or sea, ready to be refuelled and sent off in another flight. Typical rockets break up when re-entering the universe and are therefore very costly to remake time and time again. In fact, Musk claims that his reusable rockets will make space access 100 times cheaper and more accessible.



the cruise control speed whenever the car passes a new speed limit sign. But Musk plans to implement functionality that would allow drivers to do things such as summon their cars from the garage via their phones, at least when they're on private property. But how will self-driving cars like Tesla's change the world, apart from the ability to nap on the road? Well, thousands of lives would be saved each year. According to a study by the Eno Center for Transportation, if about 90% of cars on American roads were autonomous, the number of accidents would fall from six million a year to 1.3 million. So that's 10 Ways Elon Musk Is Changing The World, which of these do you think will have the biggest impact on the world? Let us know in the comments below. If you enjoyed this video, check out 10 Obscure Companies That Could Dominate The World In 10 Years.



1. SELF DRIVING CARS

What comes after electric cars? Self-driving cars of course! Elon Musk has promised the world that a completely automated Tesla will be available by the end of 2018. Tesla's Model S already includes some self-drive features, such as the ability to change lanes automatically if there's space and adjust

1. Introduce the document

2. Who is Elon Musk?

- What do you think about him?

3. List and explain briefly each of Elon Musk's projects.

- Explain whether you think they are important, life changing or just quite commonplace.

4. Which one is your favorite? Explain why.



answer the online quiz

myenglishclass.net/classes/terminales

