DOES ELON MUSK RANK? LEADERSHIP, CREATIVITY, AND STAKEHOLDER IMPACT

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Elon Musk, the dynamic leader of Tesla and SpaceX, appeared on *Business Insider's* 2016 "*Top 100 Creators*" list, a prestigious account of the most important people in the world (Martin, Loudenback & Pipia 2016). As the magazine prepared to update the list in early 2019, Gwen Botts, a new staff writer, wondered if Musk was truly worthy of the distinction. To be a *Business Insider* Creator, a leader had to make "bold moves to create value for four constituencies: shareholders, employees, consumers, and society." While praised for his boldness and vision, Musk had also been criticized for his "domineering style," and the sometimes-shaky performance of his different companies.

Gwen breezed into the newsroom, eager to get to work. With potential awardees' faces projected on the wall, the Editor-in-Chief read the names out loud. Knowing that each of the staff writers would be assigned a few potential "Creators" to evaluate, Gwen anxiously glanced around the room. When the Editor-in-Chief paused to take a breath, she quickly declared, "I'd like to evaluate Elon Musk." Taken a bit aback, the Editor-in-Chief simply responded, "Great."

Gwen smiled nervously and turned her mind to the task at hand: "Considering his leadership style and stakeholder impact, should Musk be on the list?"

The authors are listed alphabetically; they contributed equally to the development of the case. The authors developed the case for class discussion rather than to illustrate either effective or ineffective handling of the situation. The case relies on publically available data. The depiction of Business Insider's editorial process is meant to stimulate student engagement and any similarity to actual editorial practices is purely coincidental. The case and its accompanying instructor's manual were anonymously peer reviewed and accepted by the *Journal of Case Research and Inquiry, Vol. 4*, 2018, a publication of the Western Casewriters Association. The authors and the *Journal of Case Research and Inquiry* grant state and nonprofit institutions the right to access and reproduce this manuscript for educational purposes. For all other purposes, all rights are reserved to the authors. Copyright © 2018 by Benjamin N. Alexander, Patricia C. Dahm and J.F. Coget. Contact: Benjamin N. Alexander, Orfalea College of Business, California Polytechnic State University, San Luis Obispo, CA 93407, (805) 756-5305, balexa02@calpoly.edu

Launching Musk

Early Life and Personal Relationships

Musk had achieved rock star CEO status through his various ventures and his vision for society, a level of celebrity perhaps matched only by Steve Jobs among business leaders in previous decades. Actor Robert Downey Jr. had even shadowed Musk to develop his interpretation of Marvel Comics' character Tony Stark, inventor of the Iron Man suit (Favreau 2010). However, Musk's life had not been a linear ascension to global stardom, influence, and wealth. Born in 1971 in South Africa, he was very introverted and fascinated with how things worked as a child. He would often be immersed in contemplation, unable to hear others calling out to him. Bullies targeted Musk at school, once brutally pushing him down a staircase and, another time, punching him in the face so ferociously that he had to be hospitalized. His parents divorced when he was a young child. Though Musk was close with his mother, he chose to live with his father because he saw him as "sad and lonely" (Vance 2015). However, this choice led to further pain; Musk would later recount that his father was very hard on him and his brother, Kimbal. In his adult life, Musk cut all ties with his father.

In 1988, Musk left South Africa for Canada and began college there before moving to the United States. Higher education shaped Musk both intellectually and personally. While he famously dropped out of Stanford's Ph.D. program in Applied Physics after just a few days, Musk's undergraduate experience helped him focus on several big areas that he believed would change the world, areas in which he would later start companies: the internet, the transition to solar energy, and space exploration (Vance 2015).

In Canada, he met Justine Wilson, who would in due course join him in Silicon Valley and become his first wife in 2000. The couple suffered the tragedy of losing their first child to Sudden Infant Death Syndrome (SIDS) and eventually divorced in 2008 after having five children together. Musk was deeply involved in his entrepreneurial ventures at the time of the divorce.



Justine wrote that he was "obsessed with his career," while she was merely "a sideline player in the multimillion-dollar spectacle of [his] life" (Musk 2010).

First Ventures: Zip2, X.Com

Musk weathered the crash of the dot.com bubble in the early 2000s and leveraged gains from his internet firms' exits into bigger ventures in energy and space (see Exhibit 1). His first venture in 1995 was originally named Global Link Information Network and later renamed Zip2. Zip2 developed city guide software that connected users and local businesses. The firm enabled direct communication between users and local businesses through URL-initiated fax years before Google maps launched in 2005. Early on, however, Zip2 shifted from targeting individual businesses to newspapers and entered into contracts with newspaper publishers including The New York Times Company, Knight Ridder, and the Hearst Corporation (Vance 2015). In 1999, Musk sold the company to Compaq for \$307 million, netting \$16 million personally after taxes (Chafkin 2007).

Still shy of 30 years old and seemingly disinterested in leisurely enjoying his wealth, Musk wasted no time in investing in his second venture, X.com, an online banking platform. After merging with Peter Thiel's Confinity, the combined firm became PayPal. After Musk took over as CEO, the company faced significant challenges with the platform's stability and fraudulent use. In a coup, Musk was replaced as CEO while he was traveling outside the United States, and he was forced to accept an advisory role. Later, he commented that "It's not a good idea to leave the office when there are a lot of major things underway which are causing people a great deal of stress" (Elon Musk best videos 2015). After contracting malaria, Musk became even more distanced from the company's leadership. While PayPal would eventually become the industry leader in online payments, Musk's original vision for X.com as a full online banking alternative did not come to fruition. Nonetheless, PayPal was lucratively sold to eBay.com for more than \$1.5 billion in 2002 (Urban 2015a; Vance 2015).



Exhibit 1. Musk's Ventures

Sources: Chafkin 2007, 2017; Dobush 2018; Higgins 2016; Huddleston 2018; Kharpal 2017; Urban 2015a; Vance 2015, 2017; Winkler 2017

Venture	Musk's Role (dates of involvement)	Current State	
Zip2 (city guide)	Founder, Chairman (1995-1999)	Sold to Compaq in 1999	
X.com/PayPal (online banking)	Founder, CEO (replaced before sale) (1999-2002)	Sold to eBay in 2002	
SpaceX (space)	Founder, CEO, CTO (2002-)	Privately held, valued at \$21.5 billion in 2017	
Tesla (electric vehicles, solar energy)	Early investor, CEO (2008-) and Chairman (2004-2018)	Publicly traded, acquired SolarCity in 2016, Musk replaced as Chairman in 2018	
Stripe (online payments)	Investor	Privately held, valued at \$9.2 billion	
The Boring Company (Infrastructure and Tunnel development)	Founder (2016-)	Early Stage	
OpenAl (Al research)	Founder, Supporter (left board in 2018)	Active	
Neuralink	Founder, CEO (2016-)	Early stage	

Already, though, Musk's attention had shifted. With a fortune of \$165 million after PayPal's sale (Urban 2015a; Vance 2015), Musk had enough capital to pursue his other interests in space exploration and solar energy (Rhodes 2009).

Current Ventures

SpaceX

SpaceX was a privately-owned company that designed, manufactured, and launched rockets and spacecraft, founded in 2002 by Elon Musk (Vance 2015). Musk's preoccupation with space travel originated in his childhood with science fiction classics such as Isaac Asimov's *Foundation*



novels (Vance 2015). His interest in space was not purely or even primarily market-oriented. Rather, Musk viewed multi-planetary colonization as essential to ensuring the survival of humankind and Mars as the only realistic alternative to Earth. In 2017, he wrote that there were two paths for humanity: "One path is we stay on Earth forever, and then there will be some eventual extinction event... The alternative is to become a space-bearing civilization and a multi-planetary species, which I hope you will agree is the right way to go" (Musk 2017). Yet any colony must overcome challenges with terraforming, infrastructure building, and perhaps most importantly, the cost of space launch vehicles. Under President George W. Bush, NASA estimated that a human-crewed mission to Mars would cost \$50 billion, or \$10 billion per astronaut. Musk estimated that a viable colony would require a critical mass of one million colonists which, without any economies of scale, would cost \$10 quadrillion dollars, more than 500 times the United States' gross domestic product in 2016.

After failing to buy an economical launch vehicle from Russian sellers for the nonprofit Mars Oasis project in 2001 (Vance 2015), Musk founded SpaceX just prior to selling PayPal. His goal was to produce launch vehicles that were better and cheaper than the antiquated and inefficient launch vehicles then available. He observed that since the moon landing in the 1960s, no significant advances had been achieved in space flight (Urban 2015b). Compared to advances in other high-tech industries such as telecommunications, space exploration had stalled. By 2015, Musk had invested more than \$100 million into SpaceX and aimed to reduce the cost of transporting a human to Mars by a factor of 20,000, down to \$500,000 per person (Urban 2015b).

From its founding to early 2018, SpaceX had made several important advances. It had developed its own "Merlin" rocket engine and a succession of increasingly higher capacity rockets: the Falcon 1 (in reference to Star Wars' millennium falcon), the Falcon 9, and the Falcon heavy which, consisting of three Falcon 9 rockets put together, was the world's most



powerful operational rocket in 2018. SpaceX's rockets were affordable in comparison to those of competitors. According to a 7-year contract with NASA, SpaceX charged \$133 million per launch whereas Orbital, a competitor, charged \$237.5 million in 2008 (Yembrick 2008). For private clients with less stringent requirements, SpaceX charged only \$60 million, making it the most cost-efficient space launch company in the world by far (Chaikin 2012). SpaceX planned to further reduce the cost of launches by reusing rockets after landing them safely on earth and by achieving economies of scale through mass production, among other factors.

However, in 2018, SpaceX's financial viability remained uncertain, and it had suffered several setbacks with its rockets. In addition to losing several rockets at launch to explosions, two Department of Defense reports had found large numbers of "major nonconformities" relative to competitors' rockets (Thompson 2018). While SpaceX's finances were not publicly available, the Wall Street Journal had gained access to recent data and reported that the company lost \$250 million in 2015 (Winkler & Pasztor 2017; see Exhibit 2). Moreover, SpaceX's projected revenue relied on a yet-to-be-initiated satellite internet service. While the company seemed to have recovered from the 2018 accidents and lost revenue, it faced steep competition in the development of manned and unmanned rockets from several other reputable organizations including Orbital ATK, a public company with a long history in aerospace and defense, United Launch Alliance, a joint venture of Lockheed Martin and Boeing, Arianespace SA, a joint venture backed by several European governments, Blue Origin, a company controlled by Amazon founder Jeff Bezos, and Rocket Lab, a private firm focused on cost-effective satellite launches.

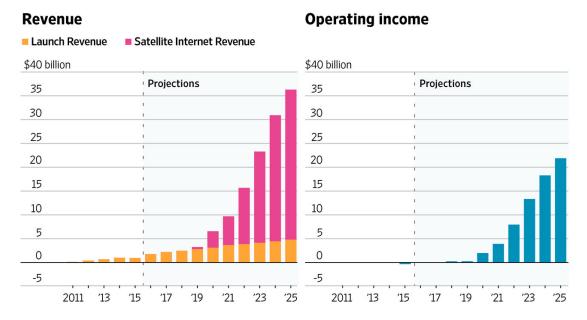


Exhibit 2. Revenue and Launch Projections at SpaceX

Source: The Wall Street Journal, Jan. 13, 2017

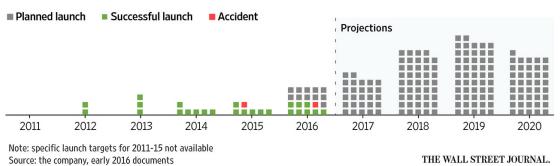
Reaching for the Stars

SpaceX projects that soaring revenue from its planned satellite-internet business will dwarf its launch revenue.



On the Launchpad

The company forecasts a dramatic increase in launches in coming years. Accidents in 2015 and 2016 caused planned launches to be delayed.



Tesla

Musk was perhaps best known for Tesla, the iconic electric car company that had disrupted the automobile industry by jumpstarting the development of electric vehicles. Founded in 2003,



Tesla initially received \$6.5 million from Musk who was one of the firm's first investors (Vance 2015). According to Musk, "the overarching purpose of Tesla Motors (and the reason I [funded] the company) [was] to help expedite the move from a mine-and-burn hydrocarbon economy towards a solar electric economy, which I believe to be the primary, but not exclusive, sustainable solution" (Musk 2006, paragraph 2). After learning that the company was losing money on each \$92,000 Roadster it sold, Musk fired the CEO and eventually took over the position himself in 2008 (Davis 2010). He was credited with redesigning many of the Roadster 2's systems as well as Tesla's supply chain. Tesla's next car, the Model S, was widely acclaimed, but considered too expensive and produced in insufficient numbers to dent the new car market. More models would soon follow. Tesla began delivering the Model X, an SUV, in 2015 and, in late 2017, started fulfilling orders for a midrange car with a \$35,000 starting price, the Model 3 (Hawkins 2017). By 2018 Tesla had also publicized plans to develop a minibus, a pickup truck, and a semi-truck.

Innovation was at Tesla's core, and the location of its headquarters in Silicon Valley was no accident. The technology to produce high-capacity batteries at low cost was a cornerstone of Tesla's ability to deliver affordable electric cars for the masses. To this end, Tesla invested billions in the development and production of lithium-ion batteries, including the construction of a Gigafactory that was 30% complete in November 2017 (Gertner 2017). Efficient lithium-ion batteries had applications beyond automobiles, such as the storage of solar energy for homes. Tesla also invested in autonomous driving technology, which was first incorporated into the Model S in October 2015 (Urban 2015c). With regard to its business model, Tesla dismissed the traditional dealership model that was standard in the United States and pursued direct sales (Ohnsman & Niquette 2014). Finally, Tesla invested in the electric vehicle infrastructure through the development of a network of superchargers, where its vehicles could be rapidly charged.



Exhibit 3. Selected Tesla Financial and Operational Data (2015-2018)

Sources: CNBC staff 2017; DeBord 2017; Ferris 2018; Statista 2018; Tesla Inc. 2018a, 2018b; Y-charts 2019; Wattles 2016

2015	2016	2017	2018
\$4.05 billion	\$7 billion	\$11.76 billion	\$14.24 billion
			(through Q3)
\$888.66 million	\$674.91 million	\$1.96 billion	\$1.12 billion
			(through Q3)
\$31.84 billion	\$33.13 billion	\$52.4 billion	\$57.15 billion
50,580	76,230	101,312	500,000*
			production target,
			unlikely to be met
72.61 million	77.25 million	79.02 million	81.6 million**
			forecast
	\$4.05 billion \$888.66 million \$31.84 billion	\$4.05 billion \$7 billion \$888.66 million \$674.91 million \$31.84 billion \$33.13 billion 50,580 76,230	\$4.05 billion \$7 billion \$11.76 billion \$4888.66 million \$674.91 million \$1.96 billion \$31.84 billion \$33.13 billion \$52.4 billion 50,580 76,230 101,312

Musk's efforts to stimulate an energy revolution through Tesla were furthered by its 2016 acquisition of Solar City, a solar panel installation and leasing company started by Musk's cousins, in which he had invested and served as chairman (Higgins 2016; Urban 2015a; Vance 2015). Solar City had become the largest installer of solar panels in the United States and claimed to have developed the world's most efficient solar panel in 2015 (Worland 2015). While SolarCity had numerous potential synergies with Tesla, its acquisition exacerbated Tesla's already precarious financial situation.

In 2018, despite being well more than a decade old and having completed an IPO in 2010, Tesla had not yet matured to the point of stability. It had had few profitable quarters, losing \$100s of millions in most years, and some analysts predicted it was on the verge of running out of cash



despite its creative system of taking deposits on future sales (Shen 2017). Moreover, Tesla had repeatedly failed to hit production targets, missing projections time and again. In announcing the Model 3 in July 2017, Musk had projected that Tesla would produce 20,000 vehicles a month by the end of the year. Pre-orders flooded in, but by early 2018 it was still struggling to produce 2,500 cars per week (Ferris 2018). As a result, customers who had placed deposits faced long, uncertain delays and many canceled their orders (Logan 2017). Still, Tesla's share price soared, and while volatile, Tesla's market capitalization exceeded that of other U.S. automobile manufacturers in stretches of 2017 and 2018 despite their vastly larger outputs. Musk's bombast seemed a double-edged sword, both driving excitement and leading to unmet expectations. After Musk tweeted that he had secured financing to take Tesla private at a significant premium, statements deemed fraudulent, Tesla, Musk, and the SEC reached a settlement of \$40 million in fines (Ohnsman 2018). The settlement further required Musk to relinquish his position as chairman, though he remained Tesla's CEO.

But Tesla's challenges did not end there. Other automobile manufacturers across the world, and particularly in China, followed Tesla's lead in developing new vehicles (e.g., McHugh 2018, Thompson 2017). In addition to the pure electric vehicles that Tesla produced, firms generated models that were plug-in hybrids and others that were powered by biofuels, natural gas, or hydrogen. Pure electric vehicles appeared to be gaining momentum, but no standard had emerged among alternatives to traditional internal combustion engines. Separately, while environmental groups acknowledged the benefits of electric cars, some asserted that more gains could be made by encouraging public transportation or cycling than with private vehicles (Casson 2018; Lynskey 2019). Though Musk announced Tesla's intent to develop an electric bus, this niche was far more crowded than electric cars (Yvkoff 2016).

Other Ventures

While SpaceX and Tesla appeared to occupy most of Musk's professional energy, he was also attached to numerous other startups and technologies (Calderone 2016). In addition to stimulating R&D in the hyperloop - a transportation concept he had articulated in a public white



paper - investing in Stripe - an online payment firm - and founding a tunneling company, The Boring Company, Musk was a cautionary voice in the development of artificial intelligence (AI). Looking beyond its application in autonomous driving, Musk viewed AI as an existential threat to humanity (Urban 2015d) and was a sponsor of OpenAI, a "non-profit AI research company, discovering and enacting the path to safe artificial general intelligence" and a co-founder of Neuralink, a firm which sought to develop brain-computer implants (Winkler 2017).

Musk's Leadership

Elon Musk was a genius according to many, such as writer and futurist Alex Lightman (Lightman 2015). He was reported to have a photographic memory and was able to recall intricate details from textbooks on aerospace engineering, for instance, and conversations he had with experts on the subject. He educated himself to become an aerospace expert within months of founding SpaceX. Employees at each of Musk's companies feared encounters with him because they knew he would drill them with extremely detailed questions covering all possible angles of the problems they were working on (Urban 2015a; Vance 2015). Regardless of their own level of expertise, many felt that Musk outsmarted them.

Furthermore, Musk worked hard. He was demanding of his employees, but more of himself. Julie Ankenbrandt, one of his collaborators at X.com said: "We all worked 20 hours a day, and he worked 23 hours" (Vance 2015). He devoured information relevant to all of his ventures and would send emails and work on problems regarding his companies at all hours, including in the middle of the night (Vance 2015). A telling story was of him reading an obscure Soviet rocket manual at an outing in Las Vegas meant to celebrate PayPal's success with his co-founders.



Albert Einstein attributed a large part of his genius to the ability to solve problems at a different level of analysis from the one at which the problem was generated (Dass 2011: 38). Musk appeared to likewise balance attention to detail with a sense for the bigger picture. He was reportedly involved in the most intimate details of each product. For instance, he worked closely with Franz von Holzhausen to design the look of Tesla's Model S, focusing on design minutia such as sun visors and insisting on retracting door handles which preserved the purity of lines (Dyer, Gregersen & Furr 2015). At SpaceX, Musk claimed to remember all of the details of his Falcon rockets down to the smallest component and how they fit into the whole architecture of the rocket (Urban 2015b; Vance 2015). But Musk also grounded his work in a vision of ensuring the survival of the human species (Urban 2015b; Vance 2015). And between the details and the overarching vision, Musk was adept at identifying commercial opportunities although the long-term viability of his various ventures remained unclear.

Though his commitment to some matters had been questioned, Musk appeared to possess an unshakeable, if selective, determination. Despite being ignored or turned down numerous times while courting his first wife, he never stopped pursuing her until she relented. Likewise, after SpaceX's third launch failure, Musk and his employees knew that they only had enough money to fund one more attempt. If they failed, SpaceX would likely die. After the rocket exploded in the sky, Musk reportedly gave SpaceX employees one of the company's most memorable and rousing speeches. He announced, "I will never give up, and I mean never" (Hsu 2008), and went on to explain calmly what went right about the launch and what went wrong, outlining a detailed plan for how to address the issues (Vance 2015). The fourth launch was successful and led NASA to award SpaceX a major contract.

Musk's ability to inspire employees helped him hire the very best people. For instance, one of SpaceX's first recruits was Tom Mueller (Vance 2015), an aerospace engineer who built amateur rockets in his garage and enjoyed a strong reputation among other rocket amateurs. Mueller went on to design SpaceX's in-house rocket engine, the Merlin, and was often regarded as



SpaceX's smartest employee, other than Musk. Even after the initial growth of his companies, Musk maintained a commitment to hiring the best of the best. Typically, this involved asking the relevant engineering departments at elite universities to identify their best students. However, credentials were not sufficient and occasionally not necessary; more important were the candidate's passion and actual abilities. The typical candidate fit a profile similar to Musk himself: a hard-core engineer with the ability to understand basic science, a passion for actually building stuff, a relentless work ethic and motivation, and the ability to collaborate with others. If such a candidate lacked a prestigious diploma, it did not matter to Musk. Until 2014, Musk was reputed to interview every potential employee, even interns, for SpaceX (Stevenson 2014).

Much as Steve Jobs used to recruit talent with the phrase "Come down here and make a dent in the universe" (Isaacson 2011: 94), Musk attracted candidates with lofty goals, such as colonizing Mars, and the perception that his firms were the most innovative in their respective fields. While technicians were paid well, Musk's ventures cut costs by paying employees less than competitors and expecting employees to work harder, to the tune of 60 to 80 hours per week, weekends often included (Boyle 2016). Recruiters were upfront with job candidates. They considered it a privilege to work at one of Musk's ventures, a crusade undertaken for the glory and the adventure rather than the money and comfort.

While often inspiring, Musk's interpersonal style could cause consternation and led some to characterize him as callous. For instance, he was once reported to reprimand a Tesla employee for choosing to attend his child's birth rather than a Tesla event (Vance 2015). Musk seemed to expect others to sacrifice their personal lives as he did in the name of lofty goals. He was also criticized as heartless for letting go of his long-time personal assistant, Mary Beth Brown. After she asked for a raise, Musk asked her to take a leave for a few weeks so that he could evaluate how replaceable she was. Upon Brown's return, he fired her.



While some of Musk's collaborators described him as humble, his self-confident style, even if predicated on ability and performance, grated on others. He assessed Facebook CEO's Mark Zuckerberg's knowledge of AI as limited and, in response to a critical news story, called the reporter "a huge douchebag and an idiot" (Elon Musk best videos 2015). He was described as frightening when he drilled his collaborators. If engineers were unable to answer his detailed questions about a problem or to go about solving it as thoroughly as Musk himself would, he would verbally tear the engineers to pieces or even fire them. If an employee told Musk that something was difficult or impossible to deliver, he'd say, "Fine. You're off the project, and I am now the CEO of the project. I will do your job and be CEO of two companies at the same time. I will deliver it." (Vance 2015: 20-241).

Gwen's Decision: Is Musk a Creator?

After doing her research, Gwen was not yet ready to make her decision. Should Musk be on the list? Before making her recommendation, she needed to return to her notes on Musk's leadership and stakeholder impact.





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References

- Boyle, A. (2016, March 2). PayScale ratings rank SpaceX and Tesla low on salary, but high on meaningfulness. Geekwire. Retrieved from https://www.geekwire.com/2016/payscale-ratings-rank-spacex-tesla-low-salary-high-meaningfulness/
- Elon Musk best videos. (2015, December 4). Elon Musk talks about his firing as Paypal CEO 2008. Retrieved from https://www.youtube.com/watch?v=9e4AaXzagfc
- Elon Musk best videos. (2015, December 3). Elon Musk calls reporter a "Huge Douchebag" 2009. Retrieved from https://www.youtube.com/watch?v=sHGSoFSMoEA
- Calderone, J. (2016, April 11). Tesla and SpaceX aren't the only things Elon Musk has invested in. Business Insider. Retrieved from http://www.businessinsider.com/companies-elon-musk-invests-in-2016-4
- Chaikin, A. (2012, January). Is SpaceX changing the rocket equation? Air and Space Magazine. Retrieved from https://www.airspacemag.com/space/is-spacex-changing-the-rocket-equation-132285884/
- Chafkin, M. (2007, December 1). Entrepreneur of the Year, 2007: Elon Musk. Inc.com. Retrieved from http://www.inc.com/magazine/20071201/entrepreneur-of-the-year-elon-musk.html.
- Chafkin, M. (2017, February 16). Elon Musk is really boring. Bloomberg. Retrieved from https://www.bloomberg.com/news/features/2017-02-16/elon-musk-is-really-boring
- Casson, R. (2018, January 25). We don't just need electric cars, we need fewer cars. Greenpeace. Retrieved from https://www.greenpeace.org/international/story/13968/we-dont-just-need-electric-cars-we-need-fewer-cars/
- CNBC staff (2017, January 3). Tesla deliveries totaled 76,230 in 2016, slightly short of expectations. CNBC. Retrieved from https://www.cnbc.com/2017/01/03/tesla-deliveries-totaled-76230-in-2016-slight-short-of-expectations.html
- Davis, J. (2010, September 27). How Elon Musk turned Tesla into the car company of the future. Wired. Retrieved from https://www.wired.com/2010/09/ff-tesla/
- Dass, R. (2011). The only dance there is. Knopf Doubleday Publishing Group.
- DeBord. M. (2017, October 3). Tesla Model 3 deliveries could be worse than expected in 2018. Business Insider. Retrieved from http://www.businessinsider.com/tesla-model-3-deliveries-2018-will-be-miss-morgan-stanley-2017-10
- Dobush, G. (2018, November 8). Elon Musk replaced by Robyn Deholm as Tesla Chair. Fortune. Retrieved from http://fortune.com/2018/11/08/elon-musk-replaced-tesla-robyn-denholm/
- Dyer, J., Gregersen, H., & Furr, N. (2015, September 7). Decoding Tesla's secret formula. Forbes. Retrieved from http://www.forbes.com/sites/innovatorsdna/2015/08/19/teslas-secret-formula/.
- Favreau, J. (2010, April 29). Elon Musk: Rocket scientist, Renaissance man. Time. Retrieved from http://content.time.com/time/specials/packages/article/0,28804,1984685_1984745_1985495,00.html
- Ferris, R. (2018, March 20). Tesla shares drop into bear-market territory, as Model 3 production worries persist. CNBC. Retrieved from https://www.cnbc.com/2018/03/20/tesla-shares-drop-into-bear-market-territory-as-model-3-production-worries-persist.html
- Gertner, J. (2017, November 7). Tesla's dangerous sprint into the future. New York Times. Retrieved from https://www.nytimes.com/interactive/2017/11/07/magazine/tech-design-future-autonomous-cars-factory-tesla-sustainability-gigafactory.html
- Hawkins, Andrew (2017, July 7). "Everything you need to know about Tesla Model 3, which is starting production today". The Verge. US. Retrieved from https://www.theverge.com/2017/7/15934756/tesla-model-3-production-electric-car-musk.



- Higgins, T. (2016, November 21). Tesla Motors closes SolarCity acquisition. Wall Street Journal. https://www.wsj.com/articles/tesla-motors-closes-solarcity-acquisition-1479742424
- Huddleston Jr., T. (2018, February, 21). Elon Musk is leaving the board of an AI safety group he co-founded. Fortune. Retrieved from http://fortune.com/2018/02/21/elon-musk-leaving-board-openai/
- Hsu, J. (2008, August 3). Strike three for SpaceX's Falcon 1 rocket. Msnbc.com. Retrieved from http://www.nbcnews.com/id/25990806/ns/technology_and_science-space/t/strike-three-spacexs-falconrocket/
- Isaacson, W. (2011). Steve Jobs (1st Ed.). New York: Simon & Schuster.
- Kharpal, A. (2017, November). SpaceX raises an extra \$100 million and is now worth an estimated \$21.5 billion. CNBC. Retrieved from https://www.cnbc.com/2017/11/28/spacex-raises-100-million-in-funding-round.html
- Lightman, A. (2015, May 27). What is Elon Musk's IQ? Quora. Retrieved from https://www.quora.com/What-is-Elon-Musks-IQ
- Logan, B. (2017, August 3). 63,000 people have canceled their Tesla Model 3 orders. Business Insider. Retrieved from http://www.businessinsider.com/tesla-model-3-cancellations-how-many-2017-8
- Lynskey, R. (2019, January 1). Electric cars are OK, but public transport is better. Sydney Morning Herald. Retrieved from https://www.smh.com.au/national/electric-cars-are-ok-but-public-transport-is-better-20181219-p50n6o.html
- Martin, E., Loudenback, T., & Pipia, A. (2016, June). Meet the top 100 business visionaries creating value for the world. Business Insider. Retrieved from http://www.businessinsider.com/bi-100-the-creators-business-visionaries-creating-value-for-the-world-2016-6#-94
- McHugh, D. (2018, August 29). Electric-car makers moving into Tesla's turf with new models. The Associated Press. Retrieved from https://www.seattletimes.com/business/electric-car-makers-moving-into-teslas-turf-with-new-models/
- Musk, E. (2006, August). The secret tesla motors master plan (just between you and me) [Web log post]. Retrieved from https://www.tesla.com/blog/secret-tesla-motors-master-plan-just-between-you-and-me
- Musk, E. (2017). Making humans a multi-planetary species. New Space, 5(2), 46-61.
- Musk, J. (2010, September). "I was a starter wife": Inside America's messiest divorce. Marie Claire. Retrieved from https://www.marieclaire.com/sex-love/a5380/millionaire-starter-wife/
- Ohnsman, A., & Niquette, M. (2014, March 10). Tesla's direct-sales push raises auto dealers' hackles. Bloomberg Technology. Retrieved from https://www.bloomberg.com/news/articles/2014-03-10/tesla-s-direct-sales-push-raises-auto-dealers-hackles
- Ohnsman, A. (2018, November 8). Tesla taps Robyn Denholm to replace Elon Musk as board chair. Forbes. Retrieved from https://www.forbes.com/sites/alanohnsman/2018/11/08/tesla-taps-robyn-denholm-to-replace-elon-musk-as-board-chair/#10a0fd9519fe
- Rhodes, J. (2009, November 6). Tesla CEO champions sustainable energy, space exploration. UDaily. Retrieved from http://www1.udel.edu/udaily/2010/nov/musk110609.html
- Rothaermel, F. T., King, D. R. (2015). Tesla Motors, Inc. McGraw Hill Education.
- Shen, L. (2017, October 31). This analyst says Tesla could be out of cash in a year. Fortune. Retrieved from http://fortune.com/2017/10/31/ubs-tesla-q3-earnings-cash-burn/
- Stevenson, R. (2014, March 10). Are you recruiting like Elon Musk? SpaceX CEO reveals his hiring secrets. Intel Blog. Retrieved from http://blog.entelo.com/are-you-recruiting-like-elon-musk-spacex-ceo-reveals-his-hiring-secrets



- Statista (2018, April 19). Worldwide vehicle sales from 2005 to 2017 (in units). Retrieved from https://www.statista.com/statistics/265859/vehicle-sales-worldwide/
- Tesla, Inc. (2018a, February 23). Form 10-K. Retrieved from http://secfilings.nasdaq.com/filingFrameset.asp?FilingID=12573636&RcvdDate=2/23/2018&CoName=TESLA%2C %20INC.&FormType=10-K&View=html
- Tesla, Inc. (2018b, February 23). Tesla third quarter 2018 update. Retrieved from http://ir.tesla.com/static-files/725970e6-eda5-47ab-96e1-422d4045f799
- Thompson, C. (2017, July 29). Tesla's Model 3 has already dramatically changed the automotive industry- here's how. Business Insider. Retrieved from https://www.businessinsider.com/elon-musk-electric-cars-plan-is-working-2017-7
- Thompson, L. (2018, January). Doubts about SpaceX reliability persist as astronaut missions approach. Forbes. Retrieved from https://www.forbes.com/sites/lorenthompson/2018/01/15/doubts-about-spacex-reliability-persist-as-astronaut-missions-approach/#132194173305
- Urban, T. (2015a). Elon Musk: The world's raddest man. Wait but why? Retrieved from http://waitbutwhy.com/2015/05/elon-musk-the-worlds-raddest-man.html
- Urban, T. (2015b). How (and why) SpaceX will colonize Mars. Wait but why? Retrieved from http://waitbutwhy.com/2015/08/how-and-why-spacex-will-colonize-mars.html
- Urban, T. (2015c). How Tesla will change the world. Wait but why? Retrieved from http://waitbutwhy.com/2015/06/how-tesla-will-change-your-life.html.
- Urban, T. (2015d). The Al Revolution: Our Immortality or Extinction. Wait but why? Retrieved from https://waitbutwhy.com/2015/01/artificial-intelligence-revolution-2.html
- Vance, A. (2015). Elon Musk: Tesla, SpaceX, and the Quest for a Fantastic Future. New York: Harper Collins.
- Vance, A. (2017, August). How two brothers turned seven lines of code into a \$9.2 billion startup. Bloomberg Businessweek. Retrieved from https://www.bloomberg.com/news/features/2017-08-01/how-two-brothers-turned-seven-lines-of-code-into-a-9-2-billion-startup
- Wattles, J. (2016, January 3). Tesla delivered 50,580 cars in 2015 and vows to ramp it up. CNN Money. Retrieved from http://money.cnn.com/2016/01/03/investing/tesla-deliveries-2015/index.html
- Winkler, R. (2017, March 27). Elon Musk launches Neuralink to connect brains with computers. Wall Street Journal. Retrieved from https://www.wsj.com/articles/elon-musk-launches-neuralink-to-connect-brains-with-computers-1490642652
- Winkler, R., Pasztor, A. (2017, January 13). Exclusive Peek at SpaceX Data Shows Loss in 2015, Heavy Expectations for Nascent Internet Service. The Wall Street Journal. Retrieved from https://www.wsj.com/articles/exclusive-peek-at-spacex-data-shows-loss-in-2015-heavy-expectations-for-nascent-internet-service-1484316455
- Worland, J. (2015, October 2). SolarCity unveils "world's most efficient' panel. Time. Retrieved from http://time.com/4059400/solarcity-efficient-panel/
- Y-charts. (2018b, April 19).Tesla Inc. market cap. Retrieved from https://ycharts.com/companies/TSLA/market_cap
- Yembrick, J. (2008, December 23). NASA Awards Space Station Commercial Resupply Services Contracts. NASA Announcements. Retrieved from https://www.nasa.gov/offices/c3po/home/CRS-Announcement-Dec-08.html
- Yvkoff, L. (2016, September 12). In the race to full electrification, buses may take first place. Forbes. Retrieved from https://www.forbes.com/sites/lianeyvkoff/2016/09/12/in-the-race-to-full-electrification-buses-may-take-first-place/#192d47867c09





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