

Elon Musk

Walter Isaacson

Walter Isaacson has written biographies of Jennifer Doudna, Steve Jobs, Albert Einstein, Benjamin Franklin, and Henry Kissinger.

He was Editor of Time and the CEO of CNN

Elon was the youngest and smallest student in his class. He had trouble picking up social cues and he had neither the desire nor the instinct to be ingratiating.

His father's impact on him would linger, despite many attempts to banish his father physically and psychologically.

“With a childhood like his in South Africa ,I think you have to shut yourself down in some ways “ says his first wife Justine, the mother of five of his ten children.

“He learned to shut down fear” said Justine. If you turn off fear then you have to turn off other things as well, like joy and empathy.

Adversity shaped me says Musk, my pain threshold became very high.

“Elon wants risk for its own sake” says Peter Thiel, his ex-partner at PayPal. “ He seems to enjoy it, indeed at times he is addicted to risk”

When Elon was three his mother decided to enroll him in school much to the objections of the teacher. His mother told the teacher “ I really have this genius child he needs to talk to other people , other than me”

“It was a theme for him, never to have his decisions driven by fear” This was present even when he was a child.

In his spare time Elon loved to make small rockets as a kid, experiment with different mixtures like swimming pool chlorine, brake fluid etc.

Reading remained his retreat. When they went to someone's house, he would immerse himself in their library.

Musk read both sets of encyclopedia in his father's house and became to his mom and sister "a genius boy"

Elon pushed through the entire sci-fi section in his school and local libraries and pushed the librarians to order more.

At age 13, Elon created a video game called *blastar*, using 123 lines of basic and some simple assembly language.

In college, he focused on the genre called strategy games that involve more than two players trying to build an empire. A high level strategy in terms of using resources, supply chain, logistics and tactical thinking was involved.

Elon transferred from Canada to Penn University. He got internship offers from Wall street, but finance did not interest him, he felt bankers and lawyers don't contribute much to society.

Elon and his brother started Zip2 , which integrated maps and business directories. They got their first big break when Navteq agreed to license the maps to the Musk's free till they made a profit.

From the very beginning of his career Musk was a demanding manager, contemptuous of work life balance. He would work all the time without vacations and expected others to do the same.

Like Steve jobs, he had a passion for simplicity when it came to designing user interface screens.

Elon will say crazy stuff but once in a while he will surprise you by knowing more about your own specialty. I think a large part of how he motivates people is his sharpness.

Although a street fighter, Musk had an unexpected ability to be realistic in defeat.

Musk was pushed out of PayPal, the second time he had been pushed out of a company in three years.

He was a visionary who didn't play well with others.

“Entrepreneurs are not risk takers, they are risk mitigators” says Roelof Botha. Not Musk, Musk was into risk, he was into amplifying risk and burning the boats so that there was no retreat.

If you combine social network with a payments platform, you could create what I wanted X.com to be.

“ I am going to colonize Mars. My mission in life is to make mankind a multiplanetary civilization”

Elon starts with a mission and later finds a way to make it work financially. That's what makes him a force of nature.

Technology only improves if a lot of people work very hard to make it better.

According to Musk, there are a few significant advances in human history- single celled life, multicellular life, differentiation of plants and animals, life extending from oceans to land etc.

One of Elon's biggest strengths is his ability to pass off his vision as a mandate from heaven.

When Musk decided he wanted to start a rocket company, all his friends dissuaded him. He focused on one metric - what would it cost to get each pound of payload into orbit.

Musk incorporated Space exploration Technologies in May 2002.

Musk's first child Nevada died an infant. This had a huge impact for a few months on Musk.

“If you were negative or thought something couldn’t be done, then you were not invited by Musk to the next meeting.” He just wants people who can make things happen.

Musk was laser focused on keeping costs down in every business he ran.

Musk insisted on setting unrealistic deadlines even when they were not necessary.

Musk does not naturally partner with people.
He doesn't like to share power.

Nasa was running on a cost plus system with partners like Boeing. Musk argued that a cost plus system stymies innovation.

Martin Eberhard started Tesla in July 2003. He and his partner Tarpenning met Musk for funding. Musk led the initial round with \$6.4 million and became Chairman of the board.

One decision Musk made for Tesla that made it a force was that Tesla would make all its components itself. At the time the decision was made, American auto companies got 50 % of their components from partners.

Musk and Eberhard were similar in many ways- they were hard driving, detail oriented engineers who could be brutally dismissive.

Eberhard by 2006 had become a celebrity and featured in a Blackberry ad as the man who created the first electric car.

In press releases, Eberhard and Tarpenning were mentioned as founders and Musk as a funder. This didn't go down well with Musk.

Musk has a rule about responsibility, for every part , every process, every specification, there must be a name attached , to personalize the blame if anything went wrong.

Designing a car is easy according to Musk, the challenge is in manufacturing it. The target for the roadster car was \$50,000 but the cost had swelled to \$83000.

Seeing the car as software rather than hardware allowed the car to be upgraded continuously, Tesla was amazed at how much functionality could be enhanced over the years, including acceleration.

Between 2000 and 2010, the US lost a third of its manufacturing jobs. By sending their factories abroad, Americans lost the ability to improve their products.

Oracle founder Larry Ellison joined only two boards – Apple and Tesla. He remarked that OCD is the reason for their success – Jobs and Musk. However, while Jobs fussed on design, Musk bought the OCD to the underlying science, engineering.

Musk bought a mothballed factory at Fremont from Toyota for \$ 42 million when it had been worth \$ 1 billion at one point. He also got Toyota to invest \$50 million in Tesla.

Hassabis co founded a company called deep mind. Elon hit it off well with Hassabis and then introduced deep Mind to Larry page at Google.

Google then bought Deep Mind and Elon was pissed off.

Musk then turned to Sam Altman and started Open AI. Musk was all about creating a safer AI system

Musk's interest in AI led him to other businesses like Neuralink.

Musk wanted Open AI to be folded into Tesla, when that didn't happen, Open Ai became a for profit company.

When President Trump pulled USA out of the Paris climate accord, Musk resigned from the Presidential Councils.

Musk was focused on making sure that Fremont factory hit production of 5000 Tesla's a week, that was the number to be profitable.

Musk calculated that he would have made a hundred decisions a day walking the shopfloor at Fremont. 20 pc of them were wrong, and would be altered later. “ If I don’t make decisions, we die” said Musk.

Musk logic

1. Question every requirement
2. Delete any part or process you can
3. Simplify and optimize
4. Accelerate cycle time
5. Automate last.

Musk was a drama addict and Grimes(his wife) had a companion trait – she was a drama magnet

The decision to use stainless steel for cybertruck had a major implication on engineering for the vehicle.

Stainless steel allowed the design to be more futuristic

By 2014, Musk turned his attention to a bigger pot of gold – providing internet service to paying customers.

Space X would launch its own satellites. Internet revenue is a trillion dollars a year, and aiming for 3 % of that would make it a \$30 billion opportunity.

Musk's idea of a good attitude employee is someone who has the desire to work maniacally.

Bezos and Musk were alike in many respects. They both disrupted industries through passion, innovation and force of will. They were both abrupt with employees, quick to call things stupid and enraged by doubters and naysayers.

Tesla's share price was knocked down to \$ 25 when Covid began. On Jan 7, 2021 it hit \$260. That made Musk the richest man in the world.

Time and the Financial Times named Musk as the person of the year.

They said Musk is staking a claim to be the most genuinely innovative entrepreneur of his generation.

“Musk has no hobbies apart from video games” according to Grimes his wife. “ he takes those seriously and it gets very intense”

Musk lessons from Polytopia video game

1. Empathy is not an asset
2. Play life like a game
3. Do not fear losing
4. Be proactive
5. Optimize every turn
6. Double down
7. Pick your battles
8. Unplug at times

Musk didn't like Bill Gates because Gates shorted Tesla. Gates believed that there would be too many EV cars and prices would fall.

Musk felt that Tesla was doing more than any other company to help climate cause.

April 2022 was good for Musk, Tesla had grown 71 % in the last 12 months. The value of his 4 companies : Tesla \$ 1 trillion, Space X \$ 100 billion, The Boring Company \$ 5.6 billion and Neuralink \$ 1 billion.

In times of unnerving success, Musk always manufactures a drama.

He had \$ 10 billion in his pocket and asked himself what product he liked – the answer was Twitter.

Musk had a simple view – Twitter should stop trying to restrict what users would say.

Musk felt that he couldn't change Twitter by just being a board member. He worked to make a bid to take over Twitter.

In a meeting with Twitter managers he was aghast that they knew so little about the details they should know about.

Musk realized that it was difficult to have a stable family life if he didn't have a family home. In the summer of 2022, he started dreaming about a family home of his own in Austin. He decided to postpone it after some time.

Musk walked into the Twitter office with a sink in hand, he wanted that to sink in.

Musk had begun to realize that creating a good venue for advertisers conflicted with his plans to open the aperture to more raucous free speech.

At Twitter, Musk asked his team to root out people who were making snarky remarks on the new leadership. He wanted to rid the workforce of its negativity.

Musk asked Twitter employees in a mail to choose if they wanted to stay or leave. 69 % of the workforce decided to leave.

Do the audaciousness and hubris that drive Musk to attempt epic feats excuse his bad behavior, his callousness, his recklessness?

The answer is a NO, of course not.