ELON MUSK'S MANAGEMENT STYLE

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Elon Musk is the world's most controversial business manager, following the example of Steve Jobs. Both their lives are detailed in biographies by Walter Isaacson, full of information on how they interacted with people, built their networks, and succeeded by iconoclastic behavior. I will summarize this information, together with research by Michel Villette on the ruthless tactics of making the big fortunes in the late (pre-Internet) 20th century. The sociology of micro-interaction will help explain how Musk generates emotional energy and spreads it to his hard-core followers. Clarity about the past can shed light on the turmoil of the present.

Growing up in the Wild West-- South Africa

Part of Musk's iconoclasm is that he is not a modern person at all; more of a Huckleberry Finn translated into the world of the digital revolution. His father was an engineer with a string of business ventures, a bush pilot in the borderlands of decolonizing Africa, trading off-the-books and running an unregistered emerald mine to avoid shakedowns by local authorities. Growing up, Elon rotated among living with his divorced mother (a fashion model with a career of her own), his father, and other relatives where he played with his brother and cousins and adventured together into the night life of dangerous cities. The opposite of the helicopter parents of contemporary America, the boys grew up unsupervised. Working with his father on construction projects in the wild, he carried a gun, learned about dangers the hard way, and got a head start on the adult world before his early teens.

Elon went to school but was essentially self-educated. In elementary school he liked to work out problems in his head, tuning out from the others while following his own thoughts. This made him unpopular for a while, but he grew up to six foot two inches, and did a lot of no-holds-barred fighting with his gang of cousins. Like his father, he followed his own interests; reading through encyclopedias, collecting technical manuals, taking apart old equipment to see how it works.

One might say Elon Musk was an unusually intelligent child. But that is hardly an adequate explanation of his success. There are many millions of people in the world who are in the top 1% of IQ, but only a handful who are pathbreaking innovators and build vast business fortunes. What else does it take? One ingredient is emotional energy-- a sociological concept that means not only passion for hard work, but also self-confidence and taking the initiative. A second ingredient is spreading emotional energy to other people--- getting other people enthusiastic about your project, and creating a self-propagating network of enthusiasts. A third ingredient is pointed out by Michel Villette: of the entrepreneurs who made great fortunes from the 1950s onwards (the creators of IKEA, Walmart, LVMH, etc.), none came from families of bureaucratic employees; their parents ran businesses (small or large), and encouraged their children to start their own money-making enterprises from an early age. They are less concerned about credentials than seizing opportunities. They acquire an entrepreneurial ethos that is aggressive and even predatory, with little respect for rules and traditions that get in the way of success.

Science-fiction and the window of opportunity

Like many other children, Elon grew up reading science fiction. It had a special appeal to him because it is about adventures in the world of future technology-- and technology was what his father made him familiar with. Elon tried to envision what the technology of space travel would be like, as a practical matter--- going beyond the fiction writers who assume future technology as a premise of the plot. So far this is little different from millions of kids who make model rockets. Elon took seriously the possibility that the earth might become uninhabitable-- from nuclear war, from climate change-- and reasoned that the solution would have to be living on another planet. Already endowed with an entrepreneurial mentality, Elon recognized that the first step must be to create a business that would make it financially feasible to build interplanetary rockets. He took it for granted that it had to be done by private initiative-- his own-- since governments are bureaucratic, embroiled in politics, and not to be trusted to do it right.

So his first problem was to make money. Having left South Africa just at the time when civil war was being fought in the transition from apartheid, he found himself in the dot-com explosion of the 1990s. While still an undergraduate at University of Pennsylvania, he started a company to compile an on-line version of the Yellow Pages-- the old unwieldy phone

book of business addresses. Elon gained experience with Internet-based business, acquired some like-minded collaborators, and got to know-- and distrust-- financial investors. Venture capitalists sold the company and Elon ended up in 1999 with $22 million.

His next venture was to create an on-line alternative to the stodgy process of getting bank loans, depositing income and clearing checks. He quickly recognized that the banking industry was hopelessly old-fashioned-- a window of opportunity to exploit someone else's weakness.*

*Villette's research found this was the chief strategy of fortune-making entrepreneurs. For instance, IKEA's founder recognized that old-fashioned downtown furniture stores were expensive and inconvenient, stealing their market with do-it-yourself assembly furniture sold from a warehouse.

Elon pivoted to an on-line version of newspaper Want Ads and For Sale Ads with payments by email. But rivals had spotted the same opportunity. Musk found himself in a race with Peter Thiel, for essentially the same universe of users. Recognizing that whoever came in second would be squeezed out, they negotiated a merger. Negotiations were tricky and hostility continued during their partnerships as PayPal. Thiel suspected Musk was overstating his number of accounts, and tried to keep him from contacting his executives for fear of Elon overwhelming them with his energy and persistence. Within three years, Musk was pushed out. Soon after, PayPal was acquired by E-bay and Musk got $250 million.

The pattern on Musk's dealings was established. He would leverage one business venture to start the next, generating money to invest and establishing financial contacts who recognized the prospects of his technological vision and his contagious enthusiasm. And he was willing to make enemies, yet come back to them later when they could work together for mutual advantage. To cite one example: Musk sized up Donald Trump as a con man and opposed him in 2016 [Isaacson: 262]. By the time of the Twitter acquisition and its aftermath, Musk was open to an alliance.

Targeting Pentagon contracting practices and building Space X

Now Musk was ready to start sending rockets into outer space. He located another big window of opportunity, actually two windows. NASA had

essentially ceased operations for deep space exploration; no launches to Mars were being made or planned. Musk would do it privately.

The other open window was presented by the government's policy for funding military procurement. The government contracted for aircraft, weapons, vehicles etc. by selecting an established provider like Boeing and guaranteeing to pay the cost of production plus a guaranteed profit. The cost-plus system had been adopted out of concern that the mega-companies of the defense industry could not be allowed to fail, leaving the US without a ready source of supply. In practice, the system allowed for regular cost overruns; all the more so in the era of high technology, where innovations are constant and complex components (like the ultra-computerized F-35 fighter) are hard to integrate. There were scandalous examples of expense-- a toilet seat cover costing thousands of dollars-- which arose out of the layers of production: the lowest level billing its cost; the next level of assembly adding another slice of cost; on up through the final product passed on to government accountants. Of course there are reports to be made and permissions to be obtained; anyone who has worked as an employee for the Federal government knows that it is often quicker and cheaper to buy something at a hardware store than to go through the required acquisitions process. The procurement system has some concern for cost, but its method of dealing with it is to add still more layers of administration that increase cost more than reduce it.

Musk decided to take an entirely different approach to the cost of building rockets. What is the cost of a rocket in materials, electronics, and fuel? He calculated that a rocket could be built for one-fiftieth (2%) of what NASA had been spending. [99] He offered to contract with the government to produce rockets at a fixed price; furthermore, to launch them, take their payload into space; and in a more advanced phase, land the rocket and reuse it. * His company, SpaceX, would be paid for its successful launches; or otherwise take the loss. It was a gamble; Musk's business model was to take risks, based on his calculations of the science involved, and pushing the margin of error.

* Re-usable rockets became possible by equipping them with visual sensors, like backup cameras when parking your car.

Musk had another big advantage over what NASA and the Defence Department had been doing. Their procedure was to compile a lengthy list of

specifications and requirements for the hardware they were purchasing; and eventually to check up on whether they had been met. This not only increased the layers of bureaucracy, but put the designers at a distance from the people doing the production. Musk was confident he could do better by retaining control. He questioned whether official requirements were based on physics and practicality, and would not accept the bland assertion of anonymous authority. Instead of taking his rockets through a lengthy process of testing, he preferred to let them explode, discovering their limits, make corrections, and move on to the next round. (In his business model, materials were the cheap part of the enterprise.) He started with small, relatively cheap rockets instead of huge payloads. Within a year, SpaceX had its first contract with DOD, launching tactical communications satellites for ground commanders to get battlefield imagery. It coincided with another window opening: the Iraq war was just starting, and the Pentagon was in its RMA (Revolution in Military Affairs), Secretary Rumsfeld's effort to computerize warfare. From here, Musk would pivot to blanketing the planet with low-altitude satellites to improve Internet access, and to other projects where cheap rockets could be deployed.

Rescues and take-overs

Buyouts gave Musk money to plough back into other ventures. He also benefitted from another window of opportunity: the stock market was on a historic roll during most of this time. Contagious enthusiasm among investors was rampant in the technology sector, where startups could leap to huge valuations, debt and current profitability being assumed to take care of themselves down the road. Once Musk established a personal network among the big players, he could add his energy and persuasiveness to get the backing for further enterprises. No longer starting from scratch, he took over failing or troubled ventures in areas where he understood the technology.

The big acquisition was Tesla. It had begun in 2003 as an amalgamation of three start-ups for cars powered by lithium batteries connected in large arrays. Musk was approached for funding, and became Chairman of the Board. He was personally committed to EVs as a solution to climate crisis, but also attracted by the thrill of a sports car with acceleration beating the Ferraris and McLarens of the gasoline-powered era. Musk intended to spend most of his attention on SpaceX, but he became increasingly critical of two failings at Tesla: The startup execs thought that EVs would reach the market faster if they used existing supply chains-- the body from Lotus, electric

engine and other components from elsewhere. [133] This ran contrary to Musk's conviction that producing as many components as possible in-house was cheaper, and more reliable than leaving oneself at the mercy of suppliers and their iffy standards. He was also upset by ugly and uncomfortable car design: if we are going to create a buzz for a $100,000 car, it had better be dazzling. Musk grew increasingly involved in decisions as Tesla floundered financially. He used his position as payer of bills to fire quarreling managers, and in 2008 took over as CEO.

Getting Tesla to financial viability would be a roller-coaster over the next 10 years. On the favorable side was another window of opportunity: climate change was becoming a popular movement among affluent, upper-middle class liberals. Favorable tax policies and government rebates to EV buyers kept the company afloat. Musk copied Steve Jobs' strategy with Apple: a product that was not only technologically advanced, but beautifully designed, and above all, cool. The fan experience of Apple's product launches and Apple Stores was replicated as Teslas hit the market. A futuristic silhouette, door handles sunk flush and operated by wireless, computerized sensors scanning all directions, allowing quasi-autonomous driving with a promise to become fully autonomous in future upgrades; repairs and upgrades sent remotely. And sporty: electric motors at the wheels eliminating the drive train and making possible unbelievable acceleration (zero to sixty under 2 seconds). A Tesla became a mobile computer, much as Apple's iPhone became a handheld computer.

Apple had won out in the highly competitive personal computer market by selling products that were fashionable, getting consumers to pay a premium for their elegance and prestige. Musk similarly led off Tesla production at the high end, selling cars with big expensive batteries (and home battery-charging cables) with a large roaming distance. Mainstream rivals like GM had the opposite strategy, selling small cheap cars with limited mileage range. But small cars make small profits; and they never acquired a wave of enthusiasm to make up for it. Big luxurious cars bring big unit profits. The problem was to get over the hump: shaving costs while bringing production up to scale. Cheaper models of the Tesla would come later.

Musk understood that an innovative product was not enough; the enterprise could only become successful if the manufacturing process was the most efficient in the market. Here Musk could bring to bear his own predilection for getting involved with the practical details of making equipment work.

Hands-on, do-it-now

Already in the days of SpaceX, Musk and his team scavenged and improvised, taking the low-cost route to producing a cutting-edge product. Since NASA launches were in abeyance, they found unused launch sites-- an atoll in the Pacific; an abandoned launch pad in Texas; eventually taking over decaying sites at Cape Canaveral. He salvaged parts from failed predecessors. Concerned with how thin the steel walls of a rocket could be (thinner is lighter, requiring less thrust and less fuel), and not satisfied with a conventional standard, he asked the welders how thin they could go-- and pushed them even thinner. If it explodes, then we'll know, he said. [328] When a crucial orbital launch was on the line (a failure would doom future funding), a rainstorm left the antenna that provided flight guidance too wet to operate. The solution: find a hair-dryer, and get an engineer up on top of the rocket blowing the sensors dry. Next morning the radio frequencies were not quite right, but Musk decided it was good enough to launch. It turned out to be so. [210]

As his enterprises became more far-flung, Musk would continue using whatever was available to get around anything holding up the works. Having acquired Twitter, he found that its servers were in danger of being cut off by a rental property in rural California where they were warehoused. Arriving at night with a small crew, and brushing aside a watchman, Musk took a flashlight and crawled under a server rack to see how they could be disconnected. Jimmying panels with a knife, he found they could be manually detached-- half expecting they might explode. He immediately sent out to rent all locally available vans, while he and his crew cut the connections and, ignoring seismic stability precautions, loaded the servers to move to his own location. [582-5] Recently the richest man in the world by market valuation but once again on the financial brink, Musk was still taking matters literally into his own hands.

During the crucial phase of expanding Tesla's factory production, Musk moved his desk to the factory floor, to be near the production line. Unlike traditional companies that compartmentalize R&D and other functions at disparate locations, Musk wanted his designers close to where the product was being made, taking feedback and modifying immediately. He wanted his best engineers to be speeding the production process. He would walk around the factory floor, not just to question the managers but to see for

himself what was holding things up. They found an assembly-line bottleneck where a robot was misaligned. Instead of spending time re-aligning the robot, they decided on the spot to see how fast a human could do the robot's task. It turned out that the human was faster and more reliable. Musk promptly unleashed his team to check every robot in the factory, and remove all robots whose work could be done better by humans. [271-78] Himself an advocate of the most advanced mechanization, he was not caught in that box either; willing to reverse himself where results were concerned. High-tech or low-tech, whatever works.

Hardcore team

Musk aimed to surround himself with a team who shared his enthusiasms: space travel, pouncing on opportunities to innovate, rethinking the basic science instead of conventional best-practices. And above all, energized by their work, carried along by their trajectory towards the unattainable goal and the impossible deadline. Musk was repeatedly setting target dates and missing them; pragmatically, a formula that generated productivity leaps along the way. But he had to have the right people: technology nerds, sci-fi geeks, who were simultaneously hands-on mechanics, programmers, and backwoods adventurers. He was not looking for people skills. In a job interview, Musk would pepper the candidate with specific questions about a technology, one detail-freak to another.

Musk had no sympathy with a trend that had taken hold in the decades of success in the high-tech industries: striving for work-life balance. Working from home, family-friendly schedules, on-site spaces for relaxation and games, were to his mind the opposite of hard-core. He wanted fanatics like himself. It was another of Musk's off-beat bets that turned out to be correct: there were quite a few technology fanatics eager to join a team led by one of themselves.

Musk's takeover of Twitter was a confrontation of work philosophies. It didn't necessarily make sense financially; the company had a problem with advertising revenue, which would become worse after the takeover. It appealed to Musk in part because it revived his early scheme to create a universal on-line hub where all manner of transactions would take place; and it converged with his vision that Tesla was not just an electric vehicle company but an advanced computer/ robotics/ AI company that would make

science fiction real. It was another one of Musk's quick decisions, a gamble but what the hell; he knew where to raise the money.

It would prove fateful because it brought a pivot in Musk's politics. He had rebelled against COVID-era restrictions while he was struggling to bring Tesla into profitability; and aligned him with conservatives accusing social media companies of censoring political opinions. Like a number of other technological innovators in the past (Henry Ford, Steve Jobs), Musk flipped from left to right as they became successful. Political polarization speaks the language of binary oppositions; but the careers of radical innovators are more like worm-holes in hyper-space.

Musk's takeover of Twitter was a lightning-strike. Existing top management were cut off from access and locked out of their offices. The rest of the work force was to be drastically culled; a soft spot of work-life balance was about to be reduced to hard-core. Musk and his posse set out to locate who was doing a lot of work and who wasn't. How could this be done in a hurry? As expert programmers themselves, Musk's team seized upon computerized records: which engineers had written the most code in a year, and which had written the least? The posse found a fraction were doing the bulk of the work. Half the company's employees were fired. But how to ensure the loyalty of those who remained? Musk decided to take a bet: among high-productivity personnel, how many would opt to stay on "to build a breakthrough Twitter 2.0" as "extremely hardcore-- working long hours at high intensity"? Those who did not opt in by the next day would receive 3 months severance. Surprisingly, almost 70 percent chose to be enrolled in the hardcore. [518-20, 550-51]

If this sounds familiar as of February 2025, it is much the same tactic as DOGE in the early Trump administration.

Party animal, perennial teenager

Musk's ownership of former-Twitter X turbo-charged his habit of posting anything that comes into his mind, multiple times a day. On-line, he is jokey, sardonic, opinionated, spitting out puns and insults. He treats his high-tech peers (Jeff Bezos, Sam Altman) like a trash-talking teenager. But Musk is not a chatty or sociable person. He is not a good public speaker, as is apparent from call-outs at Trump rallies. Musk is not an extrovert, although the distinction between extrovert and introvert has been overdone in

psychological tests. Like many people who are immersed in a particular specialty and expertise, he can be outgoing and spontaneous in the presence of like-minded people.

In his youth, Musk was far from being the popular kid or fraternity boy. As he became the center of his hard-core business teams, he frequently got into arguments over what was feasible. He developed a pattern of how to get beyond tense standoffs: suddenly changing the tone of the conversation, to silly or outlandish joking. His own version of work-life balance was to interrrupt the intensity of work with wild parties and escapades: smoking drugs during a recorded interview; inviting a sumo wrestler to his forty-second birthday party and taking him on in a match (thereby throwing out a disk in his own neck); challenging Mark Zuckerberg to a cage fight. These are macho fantasies of boys; but if you become wealthy enough, and remain free of ties to respectability, you can go on being a teenager at any age. Musk is an extreme example, but this appears to be an historical trend, at least in America since the late 20th century. *

* Perhaps this helps explain why the diagnosis of autism has mushroomed in recent decades. Musk himself has joked about being on the spectrum. The sociological question is: what causes what?

Into the future

Can Musk's management style be imitated and applied elsewhere? Musk himself imitated some aspects of Steve Jobs' style. So did many others in high-tech industries, although mainly his showy product launches. Can hard-core intensity and hands-on direction go on forever? Obviously not. Tim Cook, Jobs' successor at Apple, has a much calmer style. In any organization, routinization and burnout occur after a certain number of years. Perhaps this is a reason why Musk keeps shifting to new ventures.

Can Musk's style work in all arenas, especially those not involving business profits, or those not producing tangible hardware? A blitz through the workforce at Twitter may be a template for a blitz through the Federal government, but blitz means a lightning strike. It is a gamble and a drama, things that Musk likes and has been successful with in the past. But:

Government is not primarily designed to be efficient. Historically, bureaucracy was promoted by kings to keep rebellious aristocrats under

control. American democracy was designed to be decentralized, cross-cutting checks and balances, with an important role for law courts, in order to keep any particular faction or emotional movement from sweeping everyone else before it. Of course politics can also struggle over financial expenses and culture wars. These become part of the mix, not necessarily the determining part. What works in high-tech business cannot be simply replicated in government.

There is a still larger picture. High-tech trends can bring new crises, spilling over everywhere. As I have been writing for some years, artificial intelligence has the potential to eliminate much of the white collar work force, just as factory mechanization has done to the manfacturing labor force. Government employment at all levels (not just Federal but state and local) has been a Keynesian mechanism keeping the economy going. Without sufficient employment, people cannot buy what technology produces. Letting AI eliminate the surviving sources of employment is a formula for a terminal crisis of capitalism itself. The future may yet take another lurch in a socialist direction.

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