

60. Solar Surge

Solar Surge in the summer of 2021 marked yet another chapter in Elon Musk's relentless pursuit of innovation, this time centered on reshaping the solar energy market. Having founded SolarCity in 2006 and later integrating it into Tesla in a controversial \$2.6 billion acquisition, Musk faced increasing legal scrutiny from shareholders questioning the merger's value. To validate the buyout and ensure the business met his high expectations, Musk pushed Tesla Energy toward rapid expansion in solar roof installations, eliminating inefficiencies and cutting down on bureaucratic obstacles. His first drastic step was the removal of his cousins, Peter and Lyndon Rive, from leadership roles, citing their overemphasis on sales rather than operational efficiency. With their exit, Musk sought to implement a more aggressive, engineering-driven approach, focusing on scaling solar installations at unprecedented speeds.

To spearhead this transformation, Musk enlisted a rotating cast of leaders, all tasked with meeting his near-impossible expectations. RJ Johnson, a former military strategist, brought a disciplined, high-stakes approach, while Brian Dow, an operations expert, worked tirelessly to keep up with Musk's shifting demands. Their efforts, however, were complicated by Tesla's notoriously high turnover rate, where executives either delivered rapid results or were swiftly replaced. Musk's impatience with slow progress made every leadership position a precarious one, forcing teams to work under intense pressure. Those who survived his frequent shake-ups had to continuously prove their value, adapting to Musk's ever-evolving strategies and relentless demands for perfection.

By August 2021, Musk's hands-on approach to problem-solving became more evident as he personally evaluated solar roof installations. During a visit to Boca Chica, he scrutinized the inefficiencies of the process, pointing out flaws in packaging, delivery, and installation. His dissatisfaction with the slow progress led to heated exchanges

with engineers, who struggled to balance Musk's ambitious targets with the practical realities of rooftop labor. Unfazed by pushback, Musk insisted on streamlining every aspect of the installation process, demanding a shift toward modular components that would reduce time and labor costs. Dow and his team, despite grueling conditions and Musk's unforgiving critiques, worked tirelessly to implement Musk's proposed changes, ultimately improving efficiency in solar roof installations.

Musk's leadership, often defined by sharp mood swings, played a critical role in both inspiring and exhausting his workforce. One moment, he would chastise engineers for failing to meet expectations, and the next, he would acknowledge small victories with a nod of approval. His belief in an uncompromising, hands-on approach forced Tesla's energy division into a state of constant iteration, where failure was not an option but an essential part of the learning process. Engineers accustomed to traditional problem-solving methods found themselves forced to embrace radical simplifications, as Musk consistently challenged them to think beyond conventional constraints. This high-pressure environment, while frustrating for many, resulted in tangible advancements that significantly cut installation times and improved product scalability.

Despite notable improvements, the grand vision of scaling Tesla's solar division to match the exponential success of its automotive arm proved elusive. Unlike manufacturing cars, which could be streamlined with robotics and automated assembly lines, solar installations remained inherently labor-intensive. Dow and his team struggled with the logistical challenges of scaling a business dependent on skilled labor, regional regulations, and unpredictable rooftop conditions. Musk's frustration with these hurdles grew, as the reality of expanding solar energy infrastructure proved far more complex than simply refining a factory production line. Even with Tesla's engineering prowess, the dream of making solar roofs as ubiquitous as electric vehicles faced resistance from market limitations beyond Musk's immediate control.

The chapter highlights Musk's unyielding determination to disrupt another industry, but also underscores the challenges of scaling a service-oriented business compared

to manufacturing. While his direct involvement accelerated improvements, the practical hurdles of solar roof installations demonstrated that not all industries could be revolutionized at the same breakneck speed as Tesla's car production. Solar Surge encapsulates Musk's ability to drive innovation through sheer willpower but also reveals the occasional limits of his vision, proving that even the most ambitious ideas must sometimes yield to the realities of execution.

