BOOK REVIEW

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THE HISTORY OF THERANOS AND THE LESSONS LEARNED FROM A DROP OF BLOOD

BAD BLOOD: Secrets and lies in a Silicon Valley startup

How did a Silicon Valley startup that achieved a valuation of billions of dollars in just a few years prove to be one of the biggest corporate frauds in recent American history? The rise and fall of Theranos, a biotechnology firm, and its founder, Elizabeth Holmes, is the subject of this meticulous journalistic investigation by Wall Street Journal (WSJ) reporter and two-time Pulitzer Prize-winning author, John Carreyrou.

The company claimed to be able to perform hundreds of tests (cholesterol, cancer, infections, and even pregnancy) with only a few drops of blood, for a fraction of the price and much faster than traditional laboratories. For this breakthrough, its founder and CEO, Elizabeth Holmes, had been compared to Apple founder, Steve Jobs.

The book is divided into two parts. The first three quarters (chapters 1 to 18) are narrated in third person and provide a retrospection of the facts prior to the author’s first contact with the case. Carreyrou reports on how Holmes, still very young, was able to take full advantage of her family’s high-level connections to attract her first investors, who were neither too keen on detail nor skeptical of her ideas. The author also reveals how Holmes was able to convince an impressive roll of other influential supporters based on the good name and reputation of these early investors.

Gifted with high doses of charm, charisma, and astuteness, Holmes started out from the promise of a revolutionary technology potentially able to save millions of lives to building an inspiring narrative around her. Consequently, she took on the role of a prodigal girl (who, at age 19, dropped out of Stanford University’s Chemical Engineering course to start her own business) and was a living symbol of progress, innovation, and female empowerment.

In a tech universe filled with apps developed for saving on rent and urban transportation, her quixotic ambition echoed loudly. Within a short time, she was able to surround herself with prominent and influential people with stellar reputations, such as former US Secretaries of State George Shultz and Henry Kissinger, who joined the company’s board of directors.

Catapulted to stardom due to all these factors, Holmes was able to raise hundreds of millions of dollars of venture capital and sign million-dollar contracts. Surprisingly, she accomplished all of that without ever presenting any real evidence that her technology did indeed work. One of the contracts was signed with a large pharmacy chain, Walgreens, to offer these tests to the general public.
In its glory days, Theranos was considered one of the most promising unicorns—startup companies valued at over 1 billion dollars—with its stock market valuation hitting 9 billion dollars. At that time, the company experienced exuberant growth, reaching a total of 700 employees, including renowned PhD researchers.

Things started falling apart in 2013 when Theranos had to honor its agreement with Walgreens. Some of Theranos’ employees, aware of the tests’ flaws and the dangers to patients’ lives, began to ask questions and look for ways to expose the truth.

At this point begins the second part of the book (chapters 19 to 24). The author changes the narrative to first person and explains, in detail, his actions to disentangle this great conspiratorial farce. With a tip from an acquaintance familiar to the case, Carreyrou began a meticulous investigation, building a case against Theranos, mostly based on accusations from certain former employees’ accounts.

Although seriously threatened by the company for confidentiality breach, they provided sufficient evidence to the author and his editor, in 2015, with the support of their lawyers, to publish a series of articles on the case in the WSJ. These articles eventually unveiled the entire fraud scheme headed by Holmes and her direct advisor, Sunny Balwani, then president and COO of the company.

As extraordinary as Holmes has been in deceiving investors, customers, regulators, experts, and the media in general, there were people who doubted her promises. The reason for collecting large volumes of blood in conventional medical tests is that peripheral blood is susceptible to various types of contamination. The smaller the sample, the greater the risks of variations in the results. Experts familiar with the clinical process know this well, and certain venture capital investors who had been approached by Holmes were not convinced by her arguments, and sometimes, her attempts to raise funds were frustrated.

The facts reported in this book should be appreciated by business professionals as an alert that offers at least two great lessons. First, while it is true that individuals and organizations need to cultivate the art of storytelling, attention must also be given to the actions of cheaters and manipulators. While stories often offer symbiotic benefits to both the storyteller and the listener, it is important to recognize that they are primarily in the interest of the storytellers themselves.

The tragedy of Holmes and Theranos shows that success stories generate intense feelings which act, so to speak, as “anesthetics” for logic and skepticism. In a positive way, good stories—fictional or otherwise—make people more open minded. On the other hand, they make people excessively credulous.

When questioned about the difficulties of obtaining reliable results from such small blood samples, Holmes was reported to have found ways to overcome these difficulties and expressed that she could not disclose the details as a matter of intellectual property protection. Such an argument guaranteed the longevity of the farce, despite the fact that there is a significant difference in introducing technology for the healthcare industry as compared to other industries. In this case, due to the risks to human lives, a company cannot be exempted from presenting its technology to be reviewed by its peers.

Second, the belief that entrepreneurs can be allowed to take risks and break certain rules to make their magic happen should be viewed with caution. Ethical rules should not be broken. In this sense, this book serves to incite a discussion about ethics in light of the nuances imposed by the process of technological development, nowadays heavily influenced by individualism, extreme competition, society of spectacle, and consumption.

In this context, ethics, as observed by Kant (2009), implies the ability to think about the conduct and values of companies, simultaneously meeting the imperatives of freedom and responsibility. The latter is in line with laws and collective interests while the former is an incentive to technological development.

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REFERENCE