Can We Trust Silicon Valley?

By Nicole Bell

Part 1

Erika Cheung grew up in a small, one-bedroom trailer home with six other people. Life had not been easy for her; people often doubted her ability to succeed. When she told others that her dream was to attend the University of California, Berkeley, they laughed in her face. However, after defying the odds, she was accepted and went on to study molecular and cell biology along with linguistics. Cheung faced many hardships while at college: she was sexually assaulted multiple times and was robbed at gunpoint. This caused her to suffer from severe panic attacks. She told herself that she could push through and overcome; she was able to still graduate (Cheung).

She went to a career fair where she saw the small start-up company Theranos. When she heard of Elizabeth Holmes, a young entrepreneur who dropped out of Stanford to start a major company, she was drawn to her. Holmes prioritized hard-work and intelligence, no matter one's background. This was something that Cheung had to believe as she went through extreme hardship to earn her degree. This is how their paths crossed.

Elizabeth Holmes was determined to create a product that was able to do a full blood panel from just a drop of blood. This was revolutionary technology because it meant early detection for diseases such as cancer, diabetes, etc. It also was a way to create more affordable options for people needing blood work. This was an amazing idea to switch the dynamic of the pharmaceutical industry to give power to the people. Erika Cheung was not the only one drawn to what Theranos was proposing. Major pharmacy chains like Walgreens had also bought their product. In 2014, Ken Auletta wrote in *The New Yorker* that "If you show the pharmacist your I.D., your insurance card, and a doctor's note, you can have your blood drawn right there. (The sample is then sent to a Theranos lab.)"

However, this is where trouble arose. The device had proven over a series of clinical trials to produce too many variables when reporting results. Over seven months, Cheung had raised concerns to coworkers, the COO, and even board members about the inaccuracy of the Theranos device. "Meanwhile," according to Cheung, "Elizabeth is on the cover of every major magazine across America." Cheung was gaslighted into believing that she wasn't as intelligent as the people above her. She proceeded to quit.

In 2015, an article from John Carreyrou of the *Wall Street Journal* was released on Theranos and their deceit. Before questions could arise about the accuracy of the Theranos device, their team contacted former employees to scare them into remaining silent. Cheung not only contributed to the exposé but also sent a letter to a regulator, which resulted in a full-scale investigation.

Cheung said her father described this as her “dragon-slayer moment” (Cheung). This was the downfall of Theranos and Elizabeth Holmes.

In 2018, Elizabeth Holmes and her business partner, Ramesh Balwani, were indicted by the Department of Justice “on charges of defrauding investors out of hundreds of millions of dollars as well as deceiving hundreds of patients and doctors” (Abelson). By September 2021, Elizabeth Holmes was set to stand trial for “twelve counts of fraud and conspiracy to commit wire fraud” (Griffith and Woo). Not only did Theranos lie about the accuracy of their devices and fabricate statistics for investors, but they also hired Dr. Sunil Dhawan who is “a dermatologist with no experience in laboratory science” (Griffith) to back up their findings. Around the middle of September, the jury was set for the trial; they had selected twelve jurors, seven men and five women.

On September 17, Erika Cheung went on the stand to testify against Theranos. While the defense made many attempts to invalidate her story, Cheung was able to hold her ground and provide the same narrative she started with. According to Erin Woo and Erin Griffith of *The New York Times*, “While the defense sought to show that Theranos’s procedures were rigorous and complex, Ms. Cheung said… that its priority was to conduct tests as quickly as possible and that its machines often failed their quality-control checks.” Others have testified, but there has been so much time in between the events and the trial that memory is only so reliable. The case is now on week 10 and is predicted to last up to four months.

Elizabeth Holmes’s obsession with fortune led her to take shortcuts in her business that could cost her up to 20 years in jail. Forbes reported that “new information indicating Theranos' revenues are less than $100 million, has [led] us to revise our estimate of [Holmes’s] net worth. To zero.”

Part 2

This trial seeks to determine if Elizabeth Holmes played a role in the deception of investors that have donated millions to her company, her employees who have been running patient samples, and of doctors and patients that trusted her technology. I believe that she should be convicted of fraud due to the profound amount of evidence. I also believe that this trial will shake the trust we blindly have in the Silicon Valley tycoons with the understanding that one of their own has willfully deceived the public and the medical field.

This long-awaited case has been stretched over four years due to delays such as COVID and the birth of Elizabeth Holmes’s baby. According to Erin Griffith and Erin Woo of *The New York Times*, one of the biggest issues was finding a jury that hadn’t heard of Elizabeth Holmes. I think that says something about the severity of the accusations against her. Once the media takes a hold of something like this, it will be hard for her to come out without any repercussions. As of November 13, CNN’s Sara Ashley O’Brien has reported that “the government expects to rest its

case against the former CEO and founder of failed blood testing company Theranos in a matter of days."

O'Brien writes that they just called Dr. Kingshuk Das to the witness stand, the fourth lab director to be called to the stand. Das testified that "Holmes presented an 'alternative explanation' for why Theranos' device had detected a prostate-specific antigen in women even though women do not have prostates. When he raised the issue to her, she said it may have shown up in some women with breast cancer." This is inconceivable. This testimony is one of the instances that proves Holmes willingly knew about the failure of the technology and still proceeded with running it.

I predict that they will find her guilty. The issue at hand is if the courts find her guilty of fraud and conspiracy to commit fraud. Based on the account given by Erika Cheung, there is no way that the courts could rule in favor of the defendant. Cheung describes in her Ted Talk blatant lying encouraged by superiors in the company and the COO gaslighting her into blindly trusting the other scientists. This testimony has gained traction in the media as well. Erin Griffith from *The New York Times* reports that Dr. Das claimed the tech to be "unsuitable for clinical use." Elizabeth Holmes has too much stacked against her.

This case is an example of the race to the next best thing in the technological world and its effect on the public. This case of fraud impacts the medical world; we blindly trust pharmaceutical companies. This means that people like Elizabeth Holmes can get away with providing false positives for prostate cancer or incorrectly diagnosing someone with diabetes. This is a violation of public health and public safety. Societal obsession with Silicon Valley has bred people to do whatever it takes to be the next Steve Jobs or Mark Zuckerberg.

Unfortunately, this situation will leave patients in question of the technology their doctors are using. Is this what Elizabeth Holmes intended? Or does she truly have good intentions? I believe her lack of remorse can answer that question. John Carreyrou told *NPR* that the Silicon Valley motto is "fake it until you make it." What does that say about our expectations of the people that create all the technology we rely on to live? While the government should have more control over what medical tech is being pushed for efficient care, the law-making process takes too long to see any regulations put in place fast enough. I hope this case is something that will cause the government to impose greater regulations on medical technology.

Since the *Wall Street Journal* article was released in 2015, Elizabeth Holmes has been known as a fraud. She has been exposed for fabricating data, manipulating her voice to sound deeper, and copying the "Steve Jobs black turtleneck" look. Her obsession with these technological tycoons has put her looking at 20 years in prison. Elizabeth Holmes's case should call into question the blind trust we tend to give the Silicon Valley tycoons. As a society, we would be naïve to think that she is the only billionaire cutting corners and lying to make a profit. However, we should be able to trust that the technology medical companies are using is safe and accurate.

The bigger implication of this case should be to hold start-up companies accountable to adhering to safety protocols and promoting products backed up by science. This case may have been different if the fraud was strictly monetary. However, Elizabeth Holmes tampered with people's lives. How can we trust new medical technology if fear has been planted in the public's mind? We should take this case as a precaution to what the future could look like if we do not take action to hold companies accountable.

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