

The Theranos Whistleblower An Interview with Tyler Shultz

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Introduction

In this <u>video case</u>, Tyler Shultz recounts his experience as a recent college graduate in 2014, at Theranos, a medical technology start-up. After starting his job as a research engineer on the assay validation team, which was responsible for verifying the blood tests run on Theranos' Edison machine, Tyler noticed significant quality control failures. In the video, Tyler explains the issues he encountered and how he decided to blow the whistle on the company. He first expressed his concerns internally, but faced such hostility that he resigned from the company after eight months of employment. After Tyler left Theranos, a *Wall Street Journal* reporter, John Carreyrou, reached out to him and asked him about his time at Theranos.Initially,Tyler did not want to share his story, as his grandfather, George Shultz, was a board member of Theranos and did not support Tyler's claims. Ultimately, Tyler became an anonymous source for Carreyrou, despite hefty personal and financial costs.

The Medical Device Industry in California

The biomedical device industry was a key component of California's economy in 2014. Employment in California's pharmaceutical and medical device industry in 2014 totaled 270,000 workers; 5,000 jobs had been added between 2009 and 2013. Moreover, California led the nation in small business grants from the National Institutes of Health in 2014 (teamca.org). The state's medtech businesses attracted an estimated \$1.2 billion from venture capitalists in 2014 alone, more than the combined total received by the next nine highest states (Buntz and Newmarker).

A Brief History of Theranos

At the age of nineteen, Elizabeth Holmes dropped out of Stanford to start Theranos. The business model of the start-up was to create blood-testing technology that only required very small amounts of blood. Holmes first sought out investors who were connected to her family, and she hired Channing Robertson, a chemical engineering professor from Stanford, as an advisor and her first board member. By 2004, Holmes had raised \$6 million. The first prototype of the

Edison, a blood testing device the size of a desktop printer, debuted in 2007. In 2009, Holmes recruited Sunny Balwani, who had a background in software engineering and business, to be the president and chief operating officer of Theranos. A year later, after multiple rounds of funding, Theranos was valued at one billion dollars. (Theranos SEC filings can be found at this link: https://sec.report/CIK/0001313697.)

George Shultz, who served as secretary of state for President Ronald Regan, served on the board from 2011-2015. Holmes was a close family friend of the Shultz family, and George Shultz helped Holmes attract board members with military and congressional backgrounds. In 2015, the Theranos board members in addition to Elizabeth Holmes, Sunny Balwani, and George Shultz were:

- 1. Bill Perry, former Secretary of Defense,
- 2. Henry Kissinger, former Secretary of State,
- 3. Sam Nunn, former U.S. Senator, who served as the chairman of the Senate Armed Services Committee and the Permanent Subcommittee on Investigations
- 4. Bill Frist, former U.S. Senator, heart and lung transplant surgeon
- 5. Adm. Gary Roughead, retired U.S. Navy Admiral,
- 6. Gen. James Mattis, retired U.S. Marine Corp General,
- 7. William Foege, former director of the Centers for Disease Control and Prevention
- 8. Dick Kovacevich, former Wells Fargo CEO and chairman, and
- 9. Riley Bechtel, former Bechtel Group CEO and Chairman of the board.

Holmes, and Theranos raised more than \$700 million from late 2013 to 2015, and the company was valued at \$9 billion, but Holmes had yet to explain in detail how the blood-testing technology worked. Notably, this level of investment was both more than similar technology startups and included many atypical investors. A November 2016 article in the *Wall Street Journal* identified Rupert Murdoch, then executive chairman of News Corp and 21st Century Fox Inc. and Riley Bechtel, then chairman of the giant construction firm the Bechtel Group among the investors. The article noted that it was unusual for such powerful men to make direct investments in startup companies (Weaver et al). Holmes also received significant media attention as a female CEO of a unicorn company, a start-up valued at more than a billion dollars. Also, women in Silicon Valley were hoping for a female unicorn company to succeed, given the lack of them. In 2017, only two of the 84 unicorn companies in the United States had female CEOs (Guzman).

In March of 2018, the SEC charged Holmes and the Company's former president, Sunny Balwani, with "raising more than \$700 million from investors through an elaborate, years-long fraud in which they exaggerated or made false statements about the company's technology,

business, and financial performance" (SEC). Holmes paid a fine, gave back stock, and is barred from being an officer or director of any public company for ten years. Balwani did not settle with the SEC, and in June of 2018, the US District Attorney for Northern California announced an indictment of Holmes and Balwani on wire fraud and conspiracy charges. Theranos ceased operations on August 31, 2018, and the company was dissolved. Elizabeth Holmes and Sunny Balwani will stand trial on criminal charges that they lied to investors and doctors about the start-up's product capabilities in late 2020. The pair allegedly duped investors into funneling more than \$700 million into the start-up.

Tyler Shultz's Role at Theranos

Tyler Shultz, the grandson of George Shultz, started as an intern at Theranos in 2013, between his junior and senior years of college at Stanford. While interning at Theranos, Tyler decided to change his major from engineering to biology because he was so taken with the mission of the organization. After graduating with a degree in biology, he started work full-time at Theranos, as a research engineer, but he quickly figured out that something in the diagnostic numbers wasn't adding up. When Tyler sent information to the statistics team, knowing that it did not meet the validation requirements, it would mysteriously come back as validated. The lab and the validation reports were using different numbers to describe the same tests. He also figured out that Theranos was inaccurately telling other companies and the public about what its machines could do. No one knew how the machines actually worked. When inspectors came, they were not allowed into the room where the Theranos machines were testing blood samples. This was because Theranos was using third party equipment, rather than Theranos products, to analyze the vast majority of patient tests. Instead of immediately blowing the whistle, Tyler decided to bring up his concerns internally. He talked to Elizabeth and others in senior leadership positions in the company, only to be met with hostility. When Tyler tried to meet with Elizabeth a second time, she said she was too busy and that Tyler should write her an email. His email was returned by Sunny, in which he insulted Tyler and threatened him. Tyler also tried to explain to his grandfather what was going on, but his grandfather didn't believe him. His parents urged him to quit but to say the reason for quitting was to get his PhD, so as not to make waves. Ultimately, after only eight months of working at Theranos, Tyler resigned in 2015. He was 23 years old at the time.

Originally, Tyler did not consider talking with a reporter. As John Carreyrou, the *Wall Street Journal* reporter, explains in his book, Carreyrou sent Tyler a LinkedIn message and asked if he wanted to talk to him about Theranos. Tyler decided to reach out to Carreyrou via burner phone, and he eventually became a central anonymous source for Carreyrou's articles on Theranos.

In the two years that followed, Tyler had to defend himself against various legal threats from Theranos. He even had private investigators following him. Theranos's legal team tried to get him to sign several affidavits saying he had been talking to the *Wall Street Journal*, and they employed a variety of bullying tactics to convince him to do so. They also tried to convince Tyler to out other whistleblowers.

Throughout this whole ordeal, Tyler remained steadfast in his commitment to doing the right thing while also having the added complexity of his family's involvement in the company. His grandfather didn't believe Tyler when he came to him with his concerns, and his grandfather tried to broker a deal between Tyler and Theranos. All the while, Elizabeth Holmes continued to attend Shultz family functions.

Eventually, Carreyrou's reporting exposed Theranos for what it was: an elaborate corporate fraud. Tyler's family had to spend \$400,000 on legal fees to defend against Theranos's threats.

After leaving Theranos, Tyler worked at Stanford's Center for Magnetic Nanotechnology. Currently, he is the CEO and Co-Founder of Flux Biosciences Inc., a start-up that aims to bring medical grade diagnostics into the homes of consumers.

Video of Interview with Tyler Shultz

 $\frac{https://www.scu.edu/ethics/focus-areas/business-ethics/resources/teaching-note-interview-of-theranos-whistleblower-tyler-shultz/$

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Teaching Note

Case Overview

In this video case, Tyler Shultz recounts his experience as a recent college graduate in 2014, at Theranos, a medical technology start-up, where he was hired as a research engineer and worked for eight months. Theranos had been started by Elizabeth Holmes who dropped out of Stanford at the age of nineteen to start the company. The company's business plan was to create blood-testing technology that required only very small amounts of blood. Holmes first sought out investors who were connected to her family, and she hired Channing Robertson, a chemical engineering professor from Stanford, as an advisor and her first board member. By 2004, Holmes had raised \$6 million. The first prototype of the Edison, a blood testing device the size of a desktop printer, debuted in 2007. In 2009, Holmes recruited Sunny Balwani, who had a background in software engineering and business, to be the president and chief operating officer of Theranos. A year later, after multiple rounds of funding, Theranos was valued at one billion dollars.

Tyler Shultz started his job at Theranos in 2014. Soon after starting his job on the assay validation team, which was responsible for verifying the blood tests run on Theranos' Edison machine, Tyler noticed significant quality control failures. In the video, Tyler explains the issues he encountered and how he decided to blow the whistle on the company. He first expressed his concerns internally, but faced such hostility that he resigned from the company after eight months of employment. After Tyler left Theranos in 2015, a *Wall Street Journal* reporter, John Carreyrou, reached out to him and asked him about his time at the company. Initially, Tyler did not want to share his story, as his grandfather, George Shultz, was a board member of Theranos and did not support Tyler's claims. Ultimately, Tyler became an anonymous source for Carreyrou, despite hefty personal and financial costs.

In March of 2018, Holmes and the Company's former president, Sunny Balwani, were charged with massive fraud by the SEC. Holmes paid a fine, gave back stock, and is barred from being an officer or director of any public company for ten years. Balwani did not settle with the SEC, and in June of 2018, the US District Attorney for Northern California announced an indictment of Holmes and Balwani on wire fraud and conspiracy charges. Theranos ceased operations on August 31, 2018, and the company was dissolved. Elizabeth Holmes and Sunny Balwani will stand trial on criminal charges they lied to investors and doctors about the start-up's product capabilities in late 2020. The pair allegedly duped investors into funneling more than \$700 million into the start-up.

Learning Outcomes

After watching the video and completing the assignments, students should be able to:

- 1. Identify the organizational and personal challenges faced by whistleblowers.
- 2. Describe why some employees decide to blow the whistle, while other employees choose to stay silent.
- 3. Describe the role a board properly plays in corporate governance.
- 4. Reflect upon Tyler's decision to blow the whistle, in light of the specific organizational and personal challenges he faced.

Application

This case is most appropriate for courses in business ethics, leadership, leadership ethics and management.

Key Words

Whistleblowing, ethics, organizational blocks, leadership, corporate governance

Suggested Uses

This case can be used to focus on one or more of the following topics: whistleblowing, personal and institutional leadership, organizational blocks, and corporate governance.

- 1. Whistleblowing
- 2. Personal and Institutional Leadership
- 3. Organizational Blocks
- 4. Corporate Governance

Whistleblowing

This is a whistleblowing case in which the whistleblower (Tyler Shultz) is someone with whom today's students might identify well with as Tyler was in his 20's at the time the case occurred. In addition, the case was complicated by connections between Theranos and Tyler's grandfather, George, who served on Theranos' board.

Option 1: Have the students watch the video prior to a class meeting in which whistleblowing is to be discussed. Assign the Kaiser and Primeaux articles to be read prior to class.

Option 2: Have the students watch the video (the full video or the shorter version) in class.

Discussion questions on whistleblowing

- 1. Do you think Tyler struggled in coming to the decision to blow the whistle? Which of his actions support your opinion that Tyler did or did not struggle?
- 2. Do you think Tyler regrets blowing the whistle on Theranos? Why?

- 3. Tyler discovered the problems with Theranos' blood testing protocol in his work as a member of the assay validation team which included multiple members. Do you think other employees at Theranos knew that the blood testing protocol did not work? If so, why do you think no one else spoke up?
- 4. Do you think you would have acted in the same way as Tyler? Why or why not?
- 5. Will your knowledge of Tyler's story affect the way you would act if you should find yourself in a whistleblowing situation in the future?

Personal and Institutional Leadership

This case allows for exploration of personal and institutional leadership.

Option 1: Have the students watch the video prior to a class meeting in which whistleblowing is to be discussed. Assign the Skeet article on the Practice of Ethical Leadership to be read/reviewed before class.

Option 2: Have the students watch the video (the full video or the shorter version) in class.

Option 3: Open class with a written reflection, to be used in conjunction with Options 1 or 2.

Prompts for reflection:

- 1. What personal values would you use to decide your course of action if you were in Tyler's shoes?
- 2. Recall a time when you had to speak up against someone or something you felt was wrong. How did it feel? What values did you draw upon to decide to act.

Discussion questions for in-class discussion following reflection (optional)

- 1. Did you find certain values carried more weight than others?
- 2. How might these differ if you did not have a family member directly connected to the circumstances?
- 3. Do you have a regular set of values you use when faced with dilemmas?

Discussion questions using the Skeet, Practice of Ethical Leadership article.

- 1. Can you find evidence of the six practices of ethical leadership in the Theranos story when considering the actions of Elizabeth Holmes? Which elements were present and which were not?
- 2. Whistleblowing requires someone to step "out of position" to disclose wrongdoing. What other guideposts in organizations can people draw upon to decide when it is right to do so?

^{*}A <u>version of this Teaching Note (with answers)</u> is available for Faculty/Teaching staff registered at <u>IgnitEd</u>.

3. Do you think Tyler is someone born with natural ethical leadership skills or were they developed through experiences and shaped by other people?

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Organizational Blocks

This case allows for students to identify organizational blocks - the structures in place that prevent people from acting on their ethical instincts. The case can be used in the middle of a business ethics course when moving from a unit on the purpose of the corporation to a unit on ethical decision making frameworks.

Option 1: Have the students watch the video prior to the class meeting and read the Carucci article.

Questions on organizational blocks

- 1. What were some of the organizational blocks at Theranos profiled in the video?
- 2. If the employees of any given organization are typically good people, why do various unethical practices keep recurring?
- 3. How did a lack of open discussion impede the elimination of organizational blocks at Theranos?
- 4. Do you think you would have acted in the same way as Tyler? Why or why not?

Option 2: Have the students watch the video in class, and then read the Carucci article and answer the above questions as homework for the following class. You also could have students read the Deak article, which focuses on why Timothy Piazza's Penn State fraternity brothers chose not to seek help for their dying friend. This article highlights another type of organization, a fraternity, in which organizational blocks are also present.

Additional questions on Deak article

- 1. What were the organizational blocks present in Timothy Piazza's fraternity?
- 2. What happened as a consequence of no one speaking up?
- 3. Do you think this could happen at your college or university?

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Corporate Governance

This case allows for an examination of the role of the board of directors in a start-up in undergraduate and graduate settings.

Option 1: Have the students watch the video prior to a class meeting in which whistleblowing is to be discussed. Assign the Jones Unicorn Governance Trap article, and the Ramsey, *Business Insider* articles to be read prior to class. Can also assign Skeet article on Snap IPO to compare similar issues in another company.

Option 2: Have the students watch the video (the full video or the shorter version) in class.

Discussion questions about corporate governance

- 1. What do we know about the board of directors from this video?
- 2. What principles is Tyler supporting by his suggestion that board members talk to the "people doing the pipetting?"
- 3. Did the board of directors for Theranos support the governance principles and duties of a board?
- 4. Many people serving on the boards of start-ups are familiar with the "fake it until you make it approach". How does this play into this case?
- 5. Is it a conflict of interest for early stage investors to sit on start-up corporate boards?

Additional Information:

Outline of the Video

- 1. Tyler recaps the story and issues along the way: 8:08-22:41
- 2. Tyler talks about the complexities related to his grandfather and family: 26-29:43
- 3. Media coverage, legal issues, some aspects of grandfather's role: 30-45:56
- 4. How can we prepare students? 46:00-52:00
- 5. "Fake it until you make it" and other aspects of start-up culture, governance, audits: 52-1:00:45
- 6. Question and Answer from Jesuit Business Educator audience: 1:00:45 to 1:17 Questions asked in order:
 - a. How long did it take your grandfather to get with the program?
 - b. Was it a matter of Elizabeth and Sunny not understanding the technology or something else?
 - c. What do you think about the awards available for whistleblowers? Are they enough? Other regulatory ideas?
 - d. What did the other scientists at the company know and why didn't they act?
 - e. Multi-part question/comment on writing, why no one acted, litigation

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Additional Resources:

Readings for Assignments

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Short-Form Cases from the Markkula Center

A Foreign Corrupt Practices Act Case Study (10 minute video)

This is a much dryer, more typical whistleblowing story, not as sexy as the Theranos story and the whistleblower is much later in his career. It might serve well as a juxtaposition to the Theranos' story, involving early career whistleblowers. The protagonist has more experience and perspective to draw upon having worked longer. He is interviewed by former Markkula Center executive editor, Kirk Hanson. This would also be a good case for finance and/or accounting classes.

Apathy over Anonymity

This is a very short, written case, authored by a student, about blood testing in a lab setting, so relevant to being used with Theranos. It presents a much more likely early-career scenario that students can likely relate to more easily than the issues presented in Theranos.

Trimming Data

Another short case written by a student, in a business lab setting where an employee is asked to fudge data to improve testing results. Would be useful in a bioethics class and as an accompaniment to Theranos.

A Lengthy Dilemma

A short case written by a student, again set in a blood testing lab. An employee uncovers a ridiculously long consent form that participants are most likely not really reading or using and wonders what to do

Questioning the Average

A short written case by a student about clinical trials that may be harmful to participants. Highlights the need for care in calculations and procedures as an ethical issue.

Off the Clock

A short case written by a student about a new employee who realizes colleagues work off the clock without pay and wonders what to do.

A Sinking Situation

Another short written case about eliminating a phase of testing, but this one is in an engineering setting.

Odd One Out

A short case written by a student about an employee who uncovers corruption and is asked by her supervisor to suppress it. Set in a government work setting.

WorldCom

This is a much <u>longer</u>, <u>more traditional business</u> case that touches on issues of whistleblowing, bankruptcy, mergers and acquisitions and the relationships between companies and the professional services firms they work with. Provides a look at a more proactive investigation to uncover wrongdoing by the whistleblower.