A Review on Elizabeth Holmes and her Sinking Ship's Backstory

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Abstract: The scandalous fraud of the Theranos company and every step taken by its founder, Elizabeth Holmes, is well known in the media. In order to learn more about this topic and identify areas in which the company's management has fallen short, a variety of articles, newsletters, and papers were examined. The whole story of this enterprise was told by carefully putting in context what happened to Holmes in the workplace and in her personal life. In college, when she met Balwani, a romantic partner and important member of Theranos' management, the Stanford dropout began working on her company idea. Both were convicted of offenses connected to this type of business management. Five essential questions, as outlined by Lafley & Martin (2023), encapsulate the decision cascade that should be incorporated into any business plan. This essay attempts to explain Theranos' decision-making process in light of these considerations, complementing it with the strategic view defined by Porter's five forces. The facade of success that made it possible for investment to keep coming in while the technology did not make any progress was analysed too, divided into two parts: red flags and Elizabeth's crafted discourse about the company. Through this article, it is easy to conclude that Theranos' mismanagement was responsible for its collapse. With all that said, the following questions remain: Is there a bright future after a huge mistake? Perhaps a second attempt to help people with no ulterior motives? What will happen next? What can be expected?

Keywords: Elizabeth Holmes, Theranos, Fraud, Strategy

1. Introduction

Innumerable risks go with start-ups that aspire for quick growth via *blitzscalling*, such as Theranos' case, where it prioritises speed of growth over operational efficiency. When entering the high-tech products field, a company faces difficulties regarding technological uncertainty, potentially causing disconnection between customer needs and wants or even the product's value being dependent on complementary systems or network effects. The risk factor amplifies when unsustainable business models are adopted, unfinished product launches occur, and there is overspending and compromising ethics by fostering a culture of conformity and secrecy (Straker et al., 2021). Given this perspective, according to Carreyrou et al (2018), "Theranos' failure is a compelling saga about myopic personal ambition, bad faith inducement, an apparent dearth of strategic thought, the outdated use of design-as-decoration, fraudulent storytelling, and scientific impossibility". Such strong words always end up having a negative connotation and a strong impact on people's judgement of the company and the CEO herself. From the rise to the fall, various strategic factors and leadership decisions culminated in unravelling a case as mysterious as Theranos, where fascination meets doubt. Nevertheless, can it be seen just as a series of fraudulent mistakes, or is there a glimmer of hope that it was all just a misapplied strategy that, over time, has become an unstoppable snowball?

Thus, this work focuses on searching for the background that haunts this case. However, more than a fraud, more than a failure, this case can offer valuable lessons for companies to learn from mistakes and improve their performance to avoid meeting the same end. With that being said, this paper aims to provide an insight into the life story of Elizabeth Holmes (creator of Theranos), as well as an overview of the strategies adopted by this company during its years in business.

2. Methodology

In order to gain a deeper understanding of the Theranos case, this article aims to perform a detailed analysis based on various articles, as well as media publications and documentaries, including the well-known miniseries "The Dropout". This one-season miniseries covers a little of the entire process of the creation and downfall of the company, as well as Elizabeth's life so it was used as a complement to the writing regarding the path that this story took.

In general terms, the document can be divided into three essential parts, each of which requires the application of different information selection criteria. In the first phase, the search targeted heterographic articles and news

items, which are much more descriptive and factual. This would help to understand the emergence of the company, the story of Elizabeth Holmes, and the idea behind the creation of Theranos along the business, economic, and political context of the company so that the reader can be placed in the time and environment of the scandal. A more strategic view was considered in the second stage where articles related to business and technological practices were used to analyse Theranos' practices, strategic models, and ethics. Here, the reader can see through a strategist's eye and try to get more involved in the choices that led to failure, along with the seriousness of the consequences. Finally, in the last part, a more "subjective" look at the CEO's behaviour is considered, and a context is built for her success facade. Some interviews or even articles related to behavioural analysis are taken as examples. Please see the information on the various sources used as a basis for this work, as well as their main message (Figure 1). The most notable events concerning the company can be seen in the timeline in Figure 2.

Title	Reference	Type of reference	Main Message
Theranos phenomenon promises and fallacies	Eleftherios P. Diamandis	Article	Evaluates the promises, questions some of Theranos' promises, and mentions the dangers of putting a revolutionary technology on the market without proving its accuracy and efficacy with articles open to the public with the results
Purposeful life of sugar-coated lies: How Elizabeth Holmes legitimised her fraud	Janet Ho	Article	Analysis of Elizabeth Holmes's interviews in order to what speaking techniques she used to cover up the company's lies and to legitimise it
The Dropout	Elizabeth Meriwether	Biographical Drama Miniseries	A Hulu original series based on the Elizabeth Holmes's life story starting with the love affair with 'Sunny' Balwani and the company's build-up for the first half, and then shapes into the toxic relationship between both and the process of building a lie to keep the investments coming, finishing with the company's downfall
Holmes verdicts prompt questions over justice for patients	The Lancet	Journal	Small resume about Theranos, the fraud, the fall and the patients that testified as witnesses against the company owner
Elizabeth Holmes	Biography	Newsletter	Life of Elizabeth Holmes and Theranos' fall from the top to the bottom
Elizabeth Holmes' Net Worth Plummeted to $0 After Her Imprisonment For Fraud	StyleCaster	Newsletter	Elizabeth Holmes net worth went from $4.5 billion to $0 after stealing more than $700 million
They Still Live in the Shadow of Theranos's Elizabeth Holmes	The New York Times	Newspaper Article	Shared examples of women who suffered unfair comparisons with Elizabeth Holmes only because they are women as well
Elizabeth Holmes and Theranos: A play on more than just ethical failures	Medina Williams	Newspaper Article	A resume on each step of the Theranos case, unravelling the crucial technical points behind the scandalous scene, that more than an ethical failure reveals some plays behind the scenes

Figure 1: Various sources regarding the Theranos' case and their main message

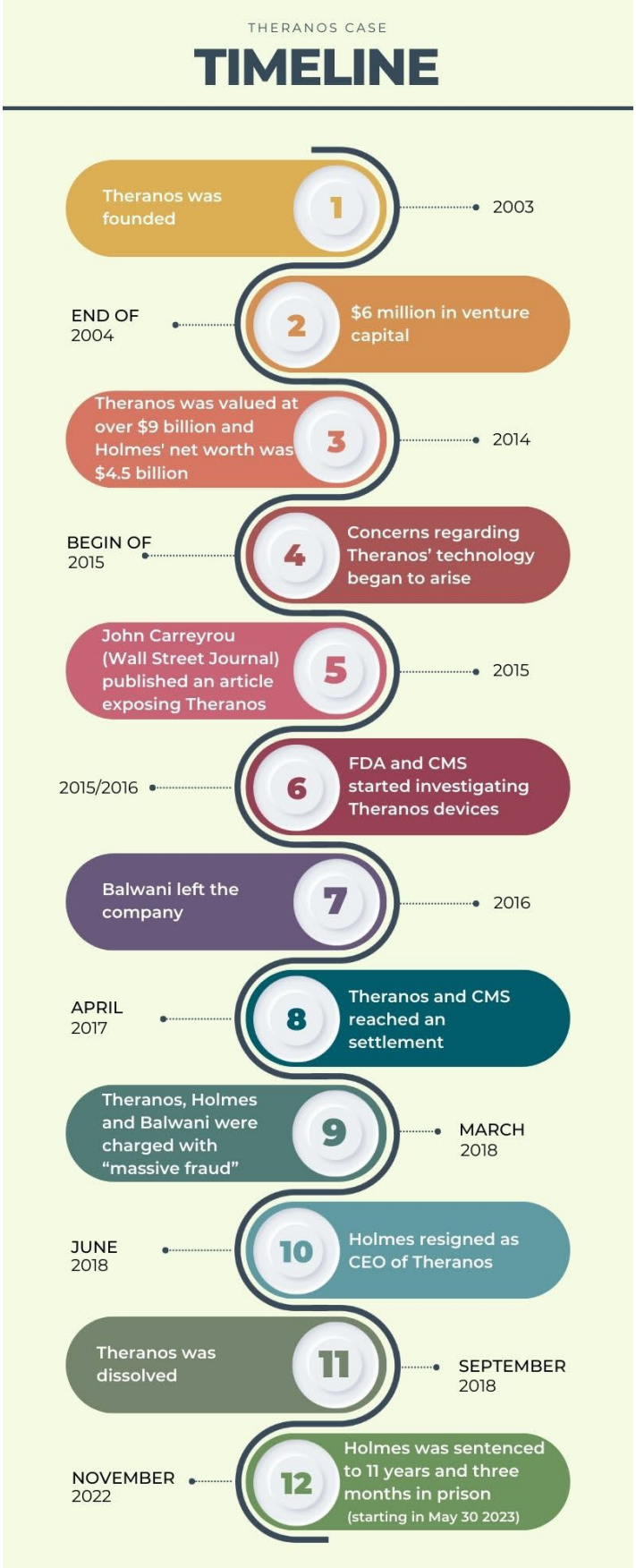

Figure 2: Theranos' most important events timeline

3. Background

3.1 How Theranos Became a Unicorn

Elizabeth Anne Holmes, born in 1984, started her entrepreneurial career with a firm providing coding translation software to Chinese institutions. After attending Stanford University, she collaborated with Channing Robertson, who later joined the board of Theranos (Donica & Biography.Com, 2023).

Her original concept was a tiny patch for drug delivery, but she later developed a novel blood test to change the healthcare system. During an interview, she claimed: "To me, there was nothing greater that I could build than something that would change the reality in our healthcare system today, which is that when someone you love gets sick, usually by the time you find that out, it is too late to be able to do something about it." (Jaffe, 2022). At the age of 19, Holmes started her startup company that ended up being rebranded as Theranos ("therapy" and "diagnosis" mashup) (Jaffe, 2022), (Mann, 2022). She stated that Theranos had developed technology that allowed tests for numerous diseases to be performed using a small amount of blood (Ranscombe, 2023) and could diagnose early-onset diseases that could be efficiently treated or prevented by offering quick and affordable lab testing to the public (Li & Diamandis, 2015). Theranos quickly developed exclusive techniques, including a nanometer tube for blood sample drawing called “nanotainer” and a lab apparatus for testing various diseases such as diabetes and cancer, using the same blood sample. Additionally, Theranos advocated for new laws to be passed in a few states so that the tests could be given out without a prescription. In biomedical engineering, patient independence, and ease of use of devices are increasingly valued, so the company’s proposals seemed very promising. Both technologies, globally estimated to be worth $52–57 billion in the early 2010s, would have completely changed the diagnostics sector (Donica & Biography.Com, 2023).

Channing Roberston introduced Holmes to prominent venture capitalists, who provide funding to companies with promising growth prospects in exchange for an ownership stake. By the end of 2004, she had raised about $6 million in venture capital and raised over $700 million for Theranos over the following ten years (Burgos & Hanson, 2023), which led to the company being valued at over $9 billion at its peak (2014). According to *Forbes,* Holmes' estimated net worth was $4.5 billion, making her the youngest self-made female billionaire in history at the age of thirty (Burgos & Hanson, 2023), (Donica & Biography.Com, 2023), (Jaffe, 2022), (Ranscombe, 2023). The company made her debut as a unicorn, i.e., a privately held business, customarily technology start-up recognised with a value of $ 1 billion or more, being rare and perpetually chased by investors looking for large returns (Straker et al., 2021).

3.2 The Beginning of the end

Theranos’ problems started due to its refusal to share information, and its lack of official press releases and websites, as its proprietary nature could expose the company to rivals. However, it struck several lucrative deals, such as one with Walgreens, so that Theranos could open labs for blood sample collection in almost 50 of the chain's locations and with expansion possibilities. Additionally, the company purported to collaborate with the US Department of Defense and major pharmaceutical companies such as Pfizer and GlaxoSmithKline, assertions that ended up being refuted (Burgos & Hanson, 2023), (Donica & Biography.Com, 2023).

Nick Bilton's Vanity Fair report revealed that Ian Gibbons, the chief scientist at Theranos, discovered several flaws in the company’s technology and warned Holmes that the tests were not yet ready for public use. Concerns about Theranos' technology reached a breaking point in 2015 when medical research professors questioned its viability (Burgos & Hanson, 2023). In the same year, the company was exposed by *Wall Street Journal* investigative reporter John Carreyrou, who began questioning the effectiveness of the Theranos machine (Mann, 2022). Carreyrou claimed the Edison blood-testing machines were unreliable in producing accurate test results due to the use of conventional equipment. The company's strict secrecy was also revealed by former employees, who claimed that although Holmes and President Ramesh "Sunny" Balwani knew about the drawbacks of the technologies being used, they forced employees to fabricate test results and false demonstrations by threatening them (Burgos & Hanson, 2023), (Donica & Biography.Com, 2023), (Ranscombe, 2023).

The Food and Drug Administration (FDA) and the Centers for Medicare & Medicaid Services (CMS) started looking into the case after the *Wall Street Journal* article was published. Theranos' "nanotainer" vial was declared by the FDA to be an "uncleared medical device" in October 2015, allegedly violating numerous FDA Title 21 Regulation infractions. In January 2016, the CMS began investigating a Theranos lab in Newark, California. After discovering anomalies in the lab's testing, it was shut down due to an "immediate jeopardy to patient health and safety". Months later, CMS prohibited Holmes from owning/running a clinical blood testing laboratory for two years. The company faced many other legal challenges and penalties from various organisations and

individuals (Burgos & Hanson, 2023), (Donica & Biography.Com, 2023). In April 2017, Theranos was fined $30,000 by CMS and banned from the blood-testing sector for two years, for focusing on technology development instead of processing clinical samples. That same month, a state fraud lawsuit was resolved by giving $4.6 million back to test-takers (Donica & Biography.Com, 2023). Holmes, Balwani (president and chief operating officer) and Theranos were charged by the US Securities and Exchange Commission in March 2018 for raising over $700 million "through an elaborate, years-long fraud". Holmes, despite not admitting guilt in her SEC settlement, agreed to pay a $500,000 penalty and relinquish majority control over Theranos. After many years of lawsuits and significant leadership changes after Balwani left the company and Holmes resigned as CEO in June 2018, David Taylor, also CEO of the company, declared on September 5, 2018, that Theranos would collapse. Holmes' net worth dropped from $4.5 billion to zero (Burgos & Hanson, 2023), (Donica & Biography.Com, 2023), (Jaffe, 2022).

3.3 Trials and Final Sentences

Holmes and Balwani were indicted on nine wire fraud and conspiracy counts in June 2018. In January 2022, the jury found Holmes guilty on three charges, totalling almost $145 million in transfers, and one conspiracy charge. In November, she was given an 11-year and three-month prison sentence starting on May 30, 2023. Balwani was obligated to reimburse $452 million (Donica & Biography.Com, 2023).

3.4 Some Relationships Work out, Some do not

Elizabeth Holmes, who ended her 12-year secret relationship with Balwani in 2016, decided to break the silence. She stated he was emotionally and sexually abusive and that he manipulated her into mismanaging the company. Although the two were indicted together, they were tried separately considering these accusations. Serving a 13-year term, Balwani was found guilty of all 12 crimes (Burgos & Hanson, 2023), (Donica & Biography.Com, 2023). However, Holmes met Billy Evans in 2017 and ended up marrying him. They had two children, in July 2021 and February 2023 (Donica & Biography.Com, 2023).

4. From a Strategist's Point of View

Theranos found itself in an unstable environment. Technological development is constantly evolving at an ever-increasing pace, competition is increasing daily, and the consumers' attention is easily lost to new products launched daily. Given these environmental factors, what set Theranos apart during its rise to the limelight (Lafley & Martin, 2013)? Visualising the company as an organisation where active decision-making is required, these choices can be seen as a decision cascade, where each step is interconnected and dependent on the other. Five important questions define the success of your strategy, so where did Theranos fail (Lafley & Martin, 2013)? During these checkpoints, Theranos' analytical framework for assessing competitive intensity on its key product will also be discussed following the five forces defined by Michael Porter (Porter, 1980) to reinforce the points that failed during the process.

4.1 Goals for a Winning Aspiration

When the question "What is your winning aspiration?" is asked, all the company's limits are already being tested, as well as the entire panorama of decisions made. Aspirations are statements that translate the ideal future, helping to turn concepts of winning into more defined concepts (Lafley & Martin, 2013).

When evaluating the internal rivalry (Porter's first force) that Theranos faced, it is important to recognize that diagnostics is a highly competitive field. This industry continuously seeks innovations and improvements in testing accuracy and efficiency, necessitating extensive networks and adherence to regulatory requirements, which intensifies the rivalry (Evans, 2023). In this context, Theranos aimed to revolutionize diagnostics by offering a multi-analytical test, challenging the traditional targeted and centralized diagnostic test paradigm (Diamandis, 2015). By introducing this groundbreaking idea, Theranos sought to disrupt the paradigm of laboratory medicine through a differentiation strategy as an innovative disruptor, allowing individuals to order blood tests from pharmacies. Holmes claimed to be "democratising" medicine and empowering patients by improving access to tests and enabling earlier detection of health problems (Fiala & Diamandis, 2018).

4.2 Where to Start the Fight?

In such a large sea of opportunities, the competitive field chosen will dictate the markets, customers and consumers, the channels chosen or even the product categories (Lafley & Martin, 2013).

Theranos focused on a specific area of the healthcare system: diagnostic and multi-analytical tests using blood samples. Given that the machine could diagnose several diseases and medical conditions, Theranos has

considered many possible consumers and customers. Theranos' battlefield consisted of fighting the usual procedures and allowing the patients to obtain a single container for all the exams in some selling point (e.g., pharmacies). This strategy would then play out in commercial outlets with wellness points and pharmacies (Fiala & Diamandis, 2018), (Westman, 2021).

Evaluating the second of Porter's five forces, the threat of new entrants, Theranos operated in a sector with high barriers to entry (Evans, 2023). The medical diagnostics industry requires adherence to strict regulatory standards, significant investment in research and development, clinical validation, and substantial venture capital. Additionally, differentiation is essential to become a market disruptor. Although Theranos initially managed to overcome these barriers, its fraudulent practices and failure to meet regulatory standards exposed its vulnerabilities, demonstrating that genuine barriers cannot be bypassed merely with capital and marketing.

Considering this, we must also examine Porter's third force, the threat of substitutes. Initially, Theranos mitigated the high threat of substitution through its differentiation. However, following the exposure of its fraud, only established companies with more reliable results could maintain a high threat of substitution, despite not offering the same advantages that Theranos claimed.

4.3 Choose the Fights and how to win Them

To determine how to win, the organisation needs to create a competitive advantage, which enables the establishment of a unique value and sustainable delivery that values the customers in a way distinct from the firm's competitors. Consequently, this leads to superior returns for the company (Lafley & Martin, 2013).

4.3.1 The miracle product

The first step was to create a distinctive biomedical device that no one in the market could match. In this way, a miniaturised clinical laboratory system was created that would do away with the need for several machines for different tests (Edison Machine) capable of carrying out tests over a wide range (Hutter & Lawrence, 2021), (Fiala & Diamandis, 2018). Inspired by her fear of needles, Holmes developed a finger prick blood acquisition system to incentivize collection, reduce needle discomfort, and decrease blood volume. The patient could speed up this process when collecting blood (buying the container at selling points) and receiving the results (in any room with an Edison machine) (Fiala & Diamandis, 2018). To round off this ingenious idea according to claims by Theranos, the cost of the tests would be 10% cheaper than centralised laboratory tests, with a faster allocation of results (Diamandis, 2015).

4.3.2 Incredible by sight, but does it work?

Theranos' offering fell in the lab-developed tests (LDT) category, which the FDA has little control over. This means that if a test is designed and used in a single lab, that lab can market the tests without the United States authority's approval. When the US Congress authorised the FDA to regulate medical devices, including in vitro diagnostic tests, in 1976, this "enforcement discretion" was established. Back then, LDTs were far more straightforward and intended for tiny patient populations, including those with uncommon disorders for which other diagnostics would not be accessible. To reinforce this type of play, Theranos also built some partnerships with the potential to spread the points of possible application of Theranos' point of blood collection. For example, through the deal with Walgreens, Holmes successfully lobbied state legislators to change laws allowing anyone to order laboratory tests without professional medical approval (Williams, 2022), (Parkins, 2019). The scenario seems to be ideal, but the lack of results that could prove the genuine technological innovation and the associated operational inefficiency put Theranos in disadvantage when it comes to the industry's rivalry, it could not sustain its competitive position against the well-established rivals.

4.3.3 From marketing to reality

When Theranos began executing its ill-advised plan, it focused on the human fear of late, inaccurate, and high-cost diagnoses, using it to promote and boost its business model. By advertising the possibility of the patient's control of their health, the Theranos' panel of routine laboratory tests would be the best choice "before it was too late". The message promoted by the company has opposed the evidence-based guidelines in the diagnostic methodology, which aim to minimise unnecessary and redundant testing for improved post-predictive and negative predictive value. While patient autonomy in medical care and direct-to-consumer diagnostics can be a good pathway in the healthcare system, shared decision-making with a trusted clinician is always necessary to support the system's core (Das & Drolet, 2022). The equipment provided by Theranos showed inaccurate results for an estimated one out of ten patients (i.e., patients testified that the tests wrongly diagnosed AIDS) (Jaffe,

2022). Consequently, many treatment decisions made for inaccurate diagnostics were applied, which is extremely dangerous (Das & Drolet, 2022).

Regarding Porter's fourth and fifth forces, customer power and supplier power, Theranos appeared to be in control of both variables (Evans, 2023). Theranos claimed that its technology reduced dependency on traditional lab equipment and reagents, and that the Edison machine provided accurate results, alleviating customers' concerns and offering privileges that traditional lab techniques could not. However, these claims were compromised, leading to a loss of credibility with buyers and reinforcing the importance of traditional lab work (the initial suppliers).

4.4 Strong Core Capabilities for a Strong Organisation – due Diligence

The capabilities of an organisation can be seen as the map of activities and competencies that support the where-to-play and how-to-win choices (Lafley & Martin, 2013).

Whether investing with personal cash or capital funds, a due diligence is essential to wise decision-making. Experts conduct profound assessments across multiple disciplines, encompassing topics such as the validity of the science or even the working hypotheses, for example, but the level of management and the management systems are two of the most crucial evaluations in a due diligence. Leadership and team functionality are essential factors after such important parts of the evaluation. Such a procedure significantly increases the likelihood of discovering dangers and strategies for mitigating them (Witek, Jr & Klein, 2023). A strong due diligence benefits both the firm and the investors allowing risks to be reduced without compromising genuine innovation. Theranos investors were scrutinised for their inadequate due diligence, frequently resulting from their fear of missing out on a well-publicized opportunity (Witek, Jr & Klein, 2023).

Under cross-examination regarding the office's due diligence lead, it was acknowledged that they had yet to examine patent applications, consult regulatory or legal professionals, or understand the many kinds of scientific testing found in review papers. Relying on Holmes and not wanting to "upset" her was stressed more than the usual extensive scrutiny associated with such big investments (Witek, Jr & Klein, 2023).

4.5 Management Systems

The final strategic choice of the cascade focuses on the management systems, since they are responsible for fostering, supporting, and measuring the strategy (Lafley & Martin, 2013).

4.5.1 From leader to employee

Regarding start-ups and organisations, the operation mode occurs in dynamic settings where they are subject to rapid changes and entrepreneurship colliding with the need for information. So, for a timely response to these market changes, information access must be well combined with work. As a parallel circumstance, the leadership is responsible for creating a culture that sustains high performance and integrity (Williams, 2022).

Unfortunately, Elizabeth Holmes's ambitious leadership failed to develop a governance structure that respected ethical values, while the company utilised a board of directors (BoD) structure which relied too heavily on management's word instead of fully comprehending day-to-day operations and overarching culture (Williams, 2022). By forcing out anyone who would ask critical questions, Elizabeth applied extensive control over the company's operations, including minimal accountability; she also tried to cultivate a persona modelled by Steve Jobs (Tourish & Willmott, 2023). Theranos' board composition comprised "formers", such as former senators, chief executive officers, and federal cabinet officials. The homogeneity of the group may be a factor, so it is less likely to probe topics and uncover potential issues. Nowadays, modern boards try to utilise a skills matrix and a board composition. Aggravating the lack of social diversity, the board was also short on biotechnology and medical expertise (Witek, Jr & Klein, 2023).

4.5.2 From employee to leader

When discussing character-based leadership, trust is the key component, and when it comes to Theranos, there are several examples of its absence. Over the years, there were several warnings from the employees due to the product's direction regarding the results achieved. During the trial testimony, it was revealed that a whistleblower in the company approached Balwani to warn him about the erroneous test results, but she was not taken seriously, and suffered the penalty of having her competence put into question. Adding to this testimony, a former lab director also testified that the firm's quality control program failed, which would have had an impact on patients. Holmes tried alternative explanations for the data, but he considered them implausible (Witek, Jr & Klein, 2023).

From this type of behavior arises the necessity to place some faith in the people working for the organization and establish an optimal practice of having various departmental leads presenting directly to the Board (Witek, Jr & Klein, 2023).

As a result of collective experience, most firms use clinician-scientists as advisors, and given the critical nature of biochemistry and laboratory science needed for Theranos' platform, it would have been essential that the professional staff involved could put the clear performance objective in order. After the resignation of the firm's lab director, the CEO's dermatologist was hired as one of two co-directors of the lab, who would spend less than ten hours working in the company (he considered it a part-time job) and never reviewed the lab's policy (Witek, Jr & Klein, 2023).

5. Facade of Success

5.1 The Signs Were Always There

How did this big lie go unnoticed for over a decade? Were there any warning signs? The first red flag is the lack of peer-reviewed or research articles about the 'revolutionising machine' developed by Theranos (Diamandis, 2015). No one was expecting this unicorn to tell the world about this innovative technology they invented, but they took it to the extreme and did not divulge any details about it. There should have been external quality assurance to monitor the blood testing data over sustained periods. It is incredible that a device in the medical field did not undergo any independent evaluations (Diamandis, 2015). Elizabeth and Theranos were questioned about it sometimes, but they always threw the "We have FDA approval" card, which was an easy way out, but the truth was that they had the FDA approval to test for herpes, and the remainder of the tests were not in the FDA field (Ho, 2021).

There were also red flags in the daily life at Theranos' headquarters. The work environment was characterised by employee isolation and high staff turnover, fostering a culture of fear. Scientists that were concerned with the company's practices and questioned its methods faced marginalisation and, in some cases, contract termination. They were also obligated to sign non-disclosure agreements (NDA) (The Lancet, 2022).

Given this environment description, it is safe to say that Theranos did not have a pleasant work environment, with many former employees reporting bullying, intimidation, deception, and cold-blooded threats (Ward, 2022). The former Theranos chemist, Erika Cheung, said that she had reservations about the company since day one and observed a pervasive atmosphere of paranoia and secrecy within the leadership, which was shown when all employees were mandated to sign an NDA when hired. The questions continued to pile up as time passed, and scientists were demanded to process samples around the clock, with the necessity of conducting tests multiple times to achieve the company's desired outcomes. The lack of interdepartmental transparency did no good to relieve Cheung's suspicions, as Theranos implemented a silo mentality in the company, which is a cognitive framework wherein the various departments within an organisation refrain from sharing information; this was done to maintain secret the absence of advancements in their product development (Ward, 2022).

Another example is the story of Tyler Schulz, who got an internship due to his grandfather's influence in the BoD. Tyler contacted Holmes via e-mail to expose the malpractices he saw in the laboratory testing. A few days later, he had a response from Balwani threatening him. The young man followed by leaving Theranos without signing an NDA and being one of the leading whistleblowers for John Carreyrou's piece, which brought down Theranos (Ward, 2022). However, the most tragic event of Theranos' toxicity is the sad story of Ian Gibbons, who committed suicide due to the pressure the company put on him.

When Theranos had a patent theft case involving Richard Fuisz, he noticed that Gibbons was almost in all patents filed by Theranos, so he had placed him to testify. This resulted in Gibbons facing a choice where he would always end up on the loser's side: or he would tell the truth and be fired by Theranos (losing his healthcare insurance, which he desperately needed due to previous cancer complications), or he would lie and hurt people's lives due to compacting with Theranos' lies. This situation made Gibbons nervous and depressed, which resulted in him taking his own life (The Lancet, 2022), (Ward, 2022), (Heaven, 2019), (Kirsch, 2022).

5.2 How to Legitimise Fraud

Even though all of this happened, Theranos was still one of the most beloved start-up stories in the entire USA, and they got more investment and endorsement from many powerful and important people in the country. For that to happen, Elizabeth Holmes' major role was to legitimise the company for outsiders because if the impression of the audience was positive, the company would continue to gain credibility and its image would

not be easily shattered. Theranos, like other firms involved in fraud, aimed to achieve legitimation as a goal (Ho, 2021). As Joutsenvirta (2013) stated, legitimation is "very much about discourse and ongoing struggles over meaning".

According to Ho (2021), 19 interviews with the Theranos CEO were analysed, and it is demonstrated that Holmes constructed a corporate image and cultivated an entrepreneurial personality cult to highlight a distinct market niche, foster a shared sense of identification, and normalise expectations. Albeit how did she "build a corporate image"? First, she started to paint a beautiful picture using abstract adjectives where Theranos was pioneering and life-changing: "We have an opportunity to do good in the world, […] by building a business as a vehicle for making a change in the world to help to shape our healthcare system and to shape it in such a way, in which we empower individuals to get access to information that […] means you do not have to say goodbye too soon" (Elizabeth Holmes Mission – *Fortune*) (Ho, 2021). Holmes' piece explores Theranos' ambiguous missions, highlighting their aspirations to positively impact the world, empower individuals, and effect global change. The use of abstract corporate goals may indicate a potential inability to support these claims with concrete facts. Then she communicated the idea that they were amongst the elites and therefore trustworthy, endeavouring to establish cultural resonance with the other corporations in Silicon Valley. Finally, she stated to the audience that Theranos was here to revolutionise: "Over the last 11 years, we have reinvented the traditional laboratory infrastructure" (Elizabeth Holmes Mission – *Fortune*) (Ho, 2021). Elizabeth attempted to instil in the people that they would change the reality of the US healthcare system; with Theranos' innovative blood-drawing technology, fostering a people-oriented image within the corporation (Ho, 2021).

6. Conclusion

With this article it was possible to understand the aspects behind the fall of Theranos, and that this tragic end could have been prevented. Even though the idea of the product that Theranos sold to the public was promising, the company was accountable for its own ending since an absence of ethics was registered. The corporation failed to act in a way that would have allowed it to implement its proposal in a just and compassionate manner. Besides, Elizabeth Holmes always tried to create a false image of herself, which in itself represents a major red flag because transparency and honesty were never valued. If all these values were to have been considered, Theranos would have had every reason to succeed.

After a careful analysis of the case in question, it emerged that Elizabeth Holmes is serving her prison sentence in a federal prison in Bryan, Texas and her scheduled release date is 29 December 2032 (1 year and 9 months before she completes the time given to her) (Silva, 2023). That said, and considering Holmes is leaving prison at a young age, what does the future hold for her? She told *The New York Times* that she still has ambitions to work in the biomedical industry: "I still dream of being able to contribute to that space", "I still feel the same calling that I've always felt, and I still think the need is there" (Silva, 2023). Will she try to return to the original idea? Will she bet on a new way of innovating in the same field? And if so, what support will she receive after what is considered a cold-blooded lie?

The fact that the information offered in this study is based on information that already exists and that there is always a chance that information will be conveyed biasedly are some of its limitations. Additionally, this is a situation in which conflicting viewpoints may emerge and obstruct the plain truth. We suggest personal interviews to be performed, if possible, in future research efforts, with Elizabeth Holmes and some of her former colleagues, at Theranos. To ascertain their views after the difficult court case and the consequences suffered.

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