**Analysis of The FTX Cryptocurrency Exchange Collapse**

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By

Tyler Donovan

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

ADVISOR

Benjamin J. Laugelli, Assistant Professor, Department of Engineering and Society

## Introduction

In early November of 2022, FTX was experiencing a liquidity crisis after its FTT token dropped about 80% in 2 days. Unable to supply withdrawals, FTX froze its assets and filed for bankruptcy on November 11, 2022, losing around $8 billion dollars of customers assets (Reiff, 2024). Current scholarly understanding of the FTX collapse points to either technical actors like diversion and the FTT token being responsible (Fu et al., 2023), or to social actors such as cultural phenomena like pseudocelebrities (Mackenzie, 2023). However, what these perspectives fail to consider is that the FTX collapse was a socio-technical problem and the relationships between the technical and social actors ultimately caused the collapse. Understanding the FTX collapse from a socio-technical standpoint allows one to better comprehend the cyclical exploitation at FTX and why the scale of this failure was so large. Additionally, this perspective offers a more holistic understanding of the relationships between actors and their specific impacts on each other which collectively caused the network to fail. In what follows, I argue that the FTX network failed because FTX strategically recruited social actors like celebrities and advertisements to garner trust and drive clients (recruit more actors) to FTX, which increased capital supply, and the technical actors such as the FTT token and leverage exploited this to increase risky investments and further reinforce social actors creating unsustainable and overleveraged conditions. My analysis draws upon Michel Callon, Bruno Latour, and John Law's actor network theory (ANT) which analyzes a technology's failure from a socio-technical viewpoint considering relationships between social actors, technical actors, and the network builder. To support my argument, I draw on primarily articles as well as videos and journals related to the FTX collapse.

## Literature Review

Several scholars have conducted research on the FTX collapse in November of 2022 with particular focus on how social conditions or technical problems caused its demise. However, few scholars have focused on the idea that the FTX collapse was socio-technical in nature and the combination of both social and technical factors is what ultimately led to the failure of FTX. For example Simon Mackenzie argued that the FTX collapse was primarily due to two new cultural phenomena: normalization of deviance and the cult of personality. The “normalization of deviance” describes how an organization becomes pro risk and pushes its boundaries through minor extensions of what it had previously done alongside a lack of accountability within an organization. Combine this with “the cult of personality,” where people see leadership as celebrities that are eccentric, confident, charismatic, and untouchable and CEOs can clear any suspicions people may have around their actions. In this specific case Mackenzie highlights Sam Bankman-Fried’s (SBF) ability to harness these two attributes to garner trust amongst the masses in a highly speculative asset class (cryptocurrency). This veil hid any suspicions of misuse of customer funds ultimately leading to the seemingly sudden demise of FTX (Mackenzie, 2023). While this interpretation gives key insights into social factors that caused FTX’s collapse, it fails to address the technical factors that caused FTX to collapse.

In this regard, Shange Fu and colleagues do a much better job at addressing the technical factors that caused FTX’s failure. Both sources agree that FTX’s token FTT and Alameda Research played key roles in FTX’s failure, however Shange Fu addresses the technical problems directly. Shange Fu and colleagues argue that FTX’s failure was due to the FTT token, leverage, and diversion. FTT was issued and raised capital at a near zero cost with no collateral meaning it had no inherent value rather than its only utility to lower trading fees on the FTX platform.

Alameda, SBF's original company, held a large majority of FTT and controlled the supply out in the market. This allowed them to directly control the token and increase the price by misusing customer funds via diversion. As a result of inflating prices, Alameda was able to leverage this and used FTT as collateral to get loans and credit from other sources to then invest into high risk assets. This created a vicious cycle of inflation of FTT and increased debt and when people started selling in mass in FTX, they did not have the liquidity to support people's withdrawals causing the exchange to collapse (Fu et al., 2023).

In conclusion, current academic research around the collapse of FTX fails to adequately explain how it ultimately failed. Analysis tends to either focus on the social aspects or technical aspects specifically without much regard to the other. My goal is to analyze the FTX collapse from a socio-technical perspective to explain how so much capital was misused in an environment where FTX was socially trusted.

## Conceptual Framework

My analysis draws upon Michel Callon, Bruno Latour, and John Law's actor-network theory, which allows me to explain the collapse of FTX from a socio-technical viewpoint by examining relationships between technical and social actors. ANT allows us to understand a system through the creation and maintenance of an actor-network. At the head of an actor-network is the network builder who recruits actors into the network and manages them. The network itself is a system of actors working together towards a common goal. The actors can be human and non-human covering a wide range of technical, conceptual, social, and other actors. Anything can be both an actor and a network creating complex associations within a network of actors ultimately building an actor-network. An actor's meaning and power within a network is dependent on its relation to other actors in a network, meaning an actor's power changes based on the network being examined. As such, the strength of a network is determined by the interconnections between~~s~~ technical and non-technical actors (Cressman, 2009). Furthermore, to expand my analysis I will draw upon Michel Callon's concept of translation, which describes the process of forming and maintaining an actor network. The key components of translation are problem identification, actor recruitment, role delegation by the network builder, mobilization of the network builder representing the actors, and the creation of a black-box where actors function as a coherent stable network (Callon, 1986).

In my analysis, I will use ANT and translation to explain how FTX's network was created and identify prevalent actors within the network. From there my analysis will focus on how these socio-technical actors were able to accelerate the growth of the network while masking its shortcomings, which eventually led to its sudden collapse.

## Social Actors and Recruitment

SBF and FTX, the network builder, strategically recruited (translation) celebrities and advertising as social actors into FTX's network to broaden the reach FTX had to investors by creating an image of trust and success. This act of recruiting celebrities into the network by the SBF is best exemplified by Joe Schoffstall, an analyst from *Fox Business*, who conducted research on the exclusive Crypto Bahamas event hosted by FTX in April 2022. In the article, he illustrates recruitment through the breadth and class of celebrities that attended the event:

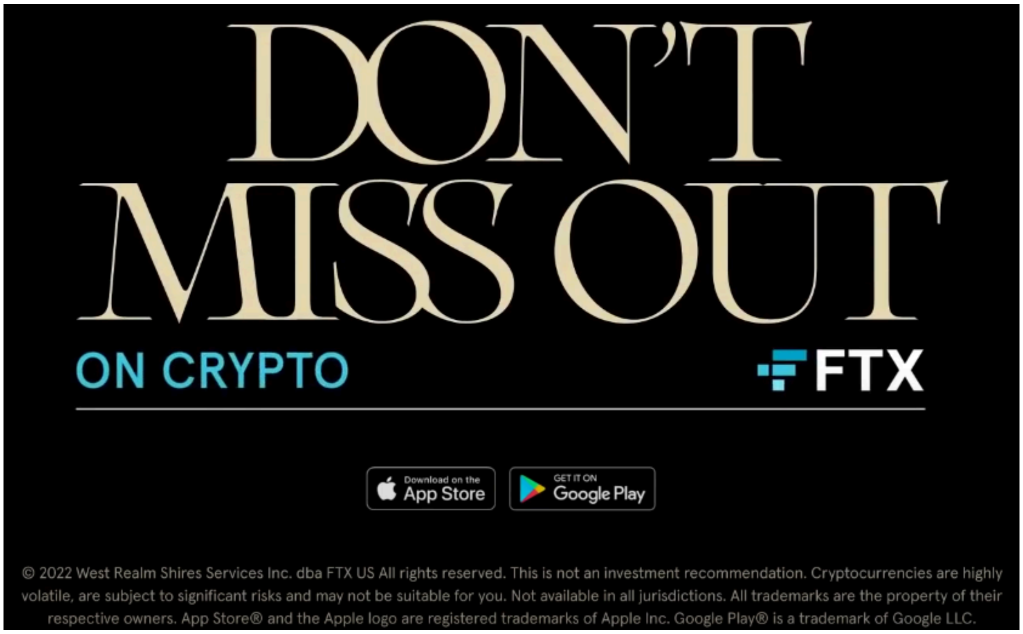
> The April conference was an exclusive gathering for the upper echelon of crypto investors, celebrities and world leaders. Musician Katy Perry, actor Orlando Bloom, NFL quarterback Tom Brady and his then-wife Giselle Bündchen attended the event. DJ Steve Aoki and former One Direction singer Liam Payne provided entertainment for the attendees, who paid upwards of $3,000 for tickets. (Schoffstall, 2022)

The first thing to note from this statement is that this conference was an exclusive gathering for specifically upper echelon investors, celebrities, and world leaders. Successful companies tend to network with successful people and visa-versa, so by holding an exclusive event where high networth individuals and companies can network with one another FTX bolsters its reputation and recruits celebrities into its network for future endeavors. Additionally world leaders stand at the face of their countries and have high levels of trust from their communities so by recruiting them into the network and being associated with them, FTX's image further conveys a sense of trust amongst the people. Second, note the celebrities mentioned and their industries. There are musicians, NFL players, super models, and actors amongst that group showing they were strategically chosen by FTX to cast a wide net when recruiting social actors into the network. By focusing on what industries celebrities are a part of, FTX is deliberately trying to gain exposure to a wide berth of networks. This allows FTX to expand its image of trust and success through its network's social actors (by extension) rather than having to prove its trustworthiness through facts and figures. If people in a celebrities network trust that celebrity, then they are likely to trust services their network builder (the celebrity) is associated with. This shows that FTX strategically selected high profile and trusted individuals to expand their own networks reach by extension of those celebrities creating faster growth.

Another indicator of FTX recruiting social actors to increase its image of trust and success is its strategic use of advertising. This can be best explained by FTX's Super Bowl ad featuring Larry David, a famous comedian and actor, who is depicted ridiculing extremely influential inventions and discoveries across different time periods, which ultimately refers back to FTX being one of them. Figure 1 shows the outro screen of the Super Bowl ad with a relevant catch phrase (Tom Crown Crypto, 2022, 2:23).

**Figure 1**

*FTX's Super Bowl 2022 Advertisement Outro*




First, in the Super Bowl ad for the first 2:08 of the video, Larry David depicted across time referring to the wheel, Declaration of Independence, coffee, etc. as bad inventions that are a waste of time, setting the context for the punchline that FTX belongs amongst these inventions. Specifically, in what follows the ad states, "It's FTX, a safe and easy way to get into crypto" with Larry David stating he's never been wrong with anything when he disagrees with it (Tom Crown Crypto, 2022). FTX was able to get Larry David, a comedian that people typically wouldn't consider to side with a fraudulent company, to do the ad creating additional public trustworthiness. Second, consider the resources required to display a Super Bowl ad and what image it conveys. In 2022 a 30 second Super Bowl ad cost upwards of 6.5 million (Mader, 2025) with this specific ad being about 2 minutes and 30 seconds and Super Bowl viewership averaging above 100 million in the last 10 years (Cunningham, 2025). This doesn't even account for the cost of production of the ad itself. This shows the public that FTX is financially successful on a large scale making people more likely to trust their services. Third, in Figure 1 from the end of the ad, notice the wording “Don’t miss out on crypto.” This wording creates a sense of urgency amongst those watching as they start to get a fear of missing out and incites action amongst them. The final thing to note is the “average” individual depicted at the end of the ad conversing with Larry David. FTX made this decision to help the typical viewer of something like the Super Bowl relate to this individual, allowing them to see themselves in his position. In doing so, the ad suggests that the "average" person is not only making the right choice by using FTX but also making an obvious decision that anyone could make. FTX is strategically doing this to appeal to people’s pathos, creating emotions of understanding and fear of missing out, which drives investors to use the product and inject capital into the network. Ultimately this ad shows FTX’s strategic recruitment and use of advertising to garner trust and drive clients into the network.

As I have argued, FTX strategically recruited celebrities and advertising as social actors to create an image of trust and success. By showcasing financial prowess through Super Bowl advertising and associating with major celebrities like Tom Brady and Katy Perry, FTX successfully created a network of social actors that projected an image of trust while also attracting individual investors. Advertising, combined with celebrity endorsements, has proven to be an effective strategy for recruiting people to a product and driving revenue, which is why FTX strategically chose these figures.

However, individuals unconvinced by advertising or celebrity endorsements may argue that these social actors do not help FTX build trust or attract new investors to the network.. People who support this viewpoint might argue that individuals, regardless of advertising or celebrity endorsements, are responsible for their own decisions and that these advertisements merely raise awareness of the product rather than actively recruiting them into the network. People have the ability to reason and simply not participate in the FTX network and advertising has no power over their own final decision they make. Additionally they would argue that instead other social actors are ultimately responsible for recruiting investors into the network like market trends, greed, and opportunity. This perspective makes recruitment of investors based on the investors personal feeling and reasons without any influence from outside sources.

From this perspective, these social actors have no real influence on the network and would argue that FTX's failure was purely due to unethical technical actors or that recruitment was driven by investors' personal incentives and decision-making. However, if FTX's failure were solely the result of unethical technical actors, with social actors playing no role, the scale of the problem would have been significantly smaller, as well as the ability of the technical actors to operate, since capital is the primary resource they require. Additionally this perspective overlooks the coercive ability that celebrities and advertisements have on people:

> By understanding what connects with us on a deeper level, advertisers can craft effective advertising that feels tailor-made for us. Whether it's a sense of nostalgia or addressing issues we care about, good advertising speaks our language. It's like a friend who knows exactly what we need. This is where brand management comes in, it's not just about putting ads out there; it's about understanding us and building a relationship. (HT Media Team, 2024)

First, notice how advertisers are trying to "craft effective advertising that feels tailor-made for us." This means that beyond informing us about a product, advertisements are actively trying to relate to people and give them strong persuasive emotions that make them feel that they were meant to "use this product" or be a part of this "community." Combine that with a celebrity that people relate with and have strong feelings toward and advertising with celebrities becomes a very strong emotional and persuasive force to recruit people into a network. This reasoning is further exemplified by the statement “It’s like a friend who knows exactly what we need” showing the depth of the feeling trying to be created in the viewers. Many individuals have experienced something like feeling that a composer understands them through what their music conveys and it creates strong emotions of understanding between those parties. When used in advertisements where the primary goal is to persuade someone, those emotions can be used to actively get someone involved in the product itself like in this case FTX. Therefore, given this evidence, the opposing viewpoint fails to consider the strong persuasive elements that advertising and celebrities have in actually recruiting users to the FTX network.

## Exploitative Technical Actors

Using the increased capital obtained from the recruitment of celebrities and advertising, FTX was able to leverage it to inflate the FTT token and utilize leverage (spending money on debt) to further invest in risky assets and reinvest into expanding the network of social actors to solidify FTXs image of trust and success. The improper structure and inflation of the FTT token is best exemplified by David Morris, a crypto news reporter for Coin Desk, who summarized the FTT token:

> One element of the grift was that FTT was what’s known as a “low-flow, high-fully diluted value” token. Only a very small portion traded publicly, but the public price for that fraction was assumed to apply to hundreds of millions of dollars of the token owned by FTX itself. This makes a rough sort of sense if you think in terms of the “equity value” that a startup founder, for instance, hangs on to after venture capital investors get their slice. (Morris, 2022)

The initial thing to note from this quote is the “low-flow, high-fully diluted value” in which Morris is referring to the FTT tokens structure. This means that the token itself had only a small portion of its value being publicly traded, however since it was “fully-diluted” this effectively gives investors the idea that all tokens are in circulation, not necessarily held by the entity that created the token itself. Effectively, this meant that FTX fully released the entire supply of the FTT token (making all tokens tradable) but instead bought and held a large portion of their own token using the revenue generated from social actor recruitment. This allowed them to control and inflate the price of the FTT token. Additionally, note that only a very small portion of FTT traded publicly. Building on the first point, this means that since FTX controlled a significant portion of the FTT supply, the token's price was not subject to the major volatility seen in many other cryptocurrencies. This allowed FTX to represent the FTT token as a less volatile and appreciating asset, establishing it as a potentially safer investment opportunity than other cryptocurrencies due to its lack of major volatility, which is necessary when looking to use it as a collateral asset. The last point to note is how Morris alludes to the fact that FTX can leverage FTT as “equity value” by tying the value of their company to the price of the FTT token. Instead of raising capital directly for FTX in exchange for equity in the company, FTX diverts investors to their FTT token, convincing them that buying the token is the same as investing in the company (similar to company shares). This strategy inflates the price of FTT or allows FTX to use it as a bargaining chip by sending FTT tokens directly to investors. All together these aspects of the FTT token all lead to either more capital gain for FTX or the inflation of the FTT token giving FTX more negotiating power.

Using the success and capital accumulation generated from the FTT token, FTX could now effectively employ leverage, which in this case involved them using the FTT token as collateral for loans. This is best explained by Cointelegraph analyst Yashu Gola in his statement about how much was taken in loans by Alameda Research and the distribution of the investment allocations:

> Notably, Alameda Research had $14.6 billion on its balance sheet as of June 30, with FTT being the largest holding at $5.8 billion, making up 88% of its net equity. In addition, the firm held $1.2 billion in Solana, $3.37 billion in unidentified cryptocurrency, $2 billion in "equity securities" and other assets. On the other hand, Alameda Research reportedly had liabilities worth $8 billion, including $2.2 billion worth of loans collateralized by FTT. That, coupled with the firm's alleged exposure to illiquid altcoins, prompted some analysts to predict its insolvency in the future. (Gola, 2022)

For background context note that Alameda Research was founded by SBF. Alameda was a key social actor directly tied to the network builder SBF that played a key role in utilizing the technical actor leverage improperly behind the scenes to avoid any suspicious activity happening within FTX itself. First, note the statement "exposure to illiquid altcoins" which directly states that Alameda is investing into extremely risky crypto assets that are even potentially illiquid. This shows that Alameda is investing large into crypto currencies that don't have the proper liquidity, which means there aren't enough tokens available to trade such that the price impact on the token isn't extreme in either direction. Since Alameda is also doing this with large amounts of money they are significantly impacting the price of these tokens and when panic unfolds, there isn't enough money for Alameda to sell those tokens for any return. Second, note that FTT makes up 88% of Alameda's net equity and when combined with that fact that FTT is also illiquid this means that Alameda is greatly inflating the price of the FTT token with their investments. Third, note Gola's statement that Alameda Research has 2.2 billion in liabilities worth of loans with FTT as collateral and reflect back upon the costs of something like the super bowl ad. This key component ultimately highlights the cyclical relationship between social and technical actors in FTX's network. Social actors recruit more investors into the network, which generates more revenue for FTX. FTX then invests in its own FTT token (through Alameda), inflating the price of FTT. Alameda, in turn, uses the now more valuable FTT as collateral to borrow more money, which is reinvested into recruiting social actors or illiquid altcoins. FTX's use of FTT as collateral to employ leverage—made possible by the success of social actors in the network—ultimately meant that when the market quickly turned downward, they were unable to properly sell their assets due to illiquidity. Additionally, they couldn't provide sufficient liquidity to their customers, as they were investing borrowed money. Thus, the relationships between social actors and technical actors in the network mutually enabled their success. However, due to the nature of the technical actors and the power of social actors' recruitment, this created a massive and sudden failure of the FTX network when the markets turned.

## Conclusion

In conclusion, FTX collapsed due to social and technical actors working together to create an overleveraged and unsustainable environment for FTX to maintain. Social actors such as celebrities and advertisements created an image of trust and recruited investors into the network providing essential capital for technical actors. The technical actors, FTT token and leverage, exploited this capital to raise additional borrowed money which was used for risky investments and recruiting more high-profile social actors. Together this caused FTX to be stripped of liquidity when it needed it and caused its collapse. Viewing the FTX collapse from this perspective allows one to understand that the collapse was not due to rogue a social or technical actor, but rather the relationship between them and how they worked together to cause the collapse. Being able to view this collapse as a socio-technical problem gives a better understanding of the contributors to the failure rather than viewing actors in isolation and this approach can help identify a more holistic and sociotechnical perspective on many other failed networks.

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