

## Fraud Risk Brainstorming at Tesla, Inc.<sup>1</sup>

**ABSTRACT:** This instructional case offers students the opportunity to explore the fraud risk assessment process and to participate in a simulated fraud brainstorming session as required by AS 2401 (formerly SAS 99) for financial statement audits. Drawing on publicly available information about Tesla, Inc. (formerly Tesla Motors), the revolutionary company behind the popular Model S all-electric vehicle, the case materials guide students through multiple learning objectives. These objectives include learning how to: (1) recognize the factors that contribute to financial statement fraud risk; (2) identify and evaluate the likelihood and severity of fraud risks; (3) analyze the ways that fraud risks can lead to material misstatements in the financial statements; (4) understand the purpose of and how to conduct a fraud brainstorming session; and (5) develop audit procedures that respond to assessed fraud risks. In a post-case learning assessment, students reported significant improvement in their knowledge, comprehension, and application of these learning objectives. Students also indicated that they enjoyed learning about these concepts in the context of this popular company. This case has both an individual and a group component, and it is designed for use in an auditing or forensic accounting course at either the undergraduate or the graduate level.

**Keywords:** fraud risk factors, fraud triangle, brainstorming session, fraud risk matrix, AS 2401, SAS 99

### INTRODUCTION

One of the most important skills needed by accountants today is the ability to analyze and detect fraud risks (Carpenter 2007; Center for Audit Quality [CAQ] 2010; PricewaterhouseCoopers [PwC] 2015). The Association of Certified Fraud Examiners (ACFE 2016) estimates that an organization typically loses five percent of its revenues every year to fraud. Beyond these losses, financial statement frauds also have far-reaching negative consequences on investors, employees, suppliers, and other stakeholders of the corporation. Because of the importance of fraud detection to the integrity of our markets, auditing standards (i.e., Public Company Accounting Oversight Board [PCAOB] 2016a, 2016b, AS 2401, American Institute of Certified Public Accountants [AICPA] 2006, AU Section 316; International Federation of Accountants [IFAC], ISA 240) require that accountants fulfill their responsibility to obtain *reasonable assurance* about whether or not the financial statements they audit are free of material misstatement due to error or fraud. In particular, Auditing Standard 2401 (formerly Statement on Auditing Standards No. 99), *Consideration of Fraud in a Financial Statement Audit*, requires that fraud risk brainstorming sessions be incorporated into every audit engagement. These sessions are designed to increase the probability that auditors will detect intentional misstatements and to help set the right tone for professional skepticism and heightened sensitivity to fraud risk throughout the engagement (Ramos 2003).

### YOUR TASK

This case requires you to imagine that you have been asked to participate in a fraud risk brainstorming session as part of the planning procedures for the 2023 financial statement audit of Tesla, Inc. (formerly Tesla Motors). This case has two parts. In Part I, you will read background information on Tesla, Inc., learn how the concept of the “fraud triangle” is used to identify fraud

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<sup>1</sup> This student case is an updated version of the previously published: Hess, M. F., and L. M. 2018. Andiola. Fraud risk brainstorming at Tesla Motors. *Issues in Accounting Education* 33 (2): 19-34.

risk factors, and work to complete the Part I case requirement questions designed to help you identify some of the financial statement fraud risks associated with this company.

It is important to note that as of the time of the writing of this case, Tesla, Inc. has not been accused of financial statement fraud. Nevertheless, you and your team should resist the natural inclination to presume that management is honest, and exercise professional skepticism in evaluating fraud risks at this company. Auditing standards remind us that we should conduct the engagement with a mindset that recognizes the possibility that a material misstatement due to fraud could be present, regardless of any past experience with the entity and regardless of the auditor's belief about management's honesty and integrity (PCAOB 2016a).

In Part II, you will learn how to conduct a fraud risk brainstorming session and how to adapt your planned procedures to respond to identified fraud risks. After reading Part II, you will work as part of an audit team to conduct a fraud risk brainstorming session. During this session, your team will be responsible for completing a fraud risk matrix and writing a memo to include in the audit file that documents the results of your fraud risk assessment and identifies how your team believes the nature, timing, and extent of the audit procedures should be altered to respond to the fraud risks you identify.

## PART I

### **Tesla, Inc. Case Background**

#### ***Founding and History of Tesla, Inc.***

Tesla, Inc. (NASDAQ: TSLA) was founded in 2003 by a group of engineers in Silicon Valley with the vision of accelerating the world's transition to sustainable transport. To that end, Tesla Inc. (formally Tesla Motors) has created “cars without compromise” – that is, all-electric vehicles that offer all of the torque, power, and style of high-end automobiles with none of the emissions. The company's mission is "to accelerate the world’s transition to sustainable energy" (Tesla, Inc. 2022, 2). Tesla’s first release was the Roadster in 2008, which offered 0 to 60 mph acceleration in 3.7 seconds and a range of 245 miles per charge of its lithium-ion battery. In 2012, Tesla launched the Model S, a four-door sedan that was named *Motor Trend’s* 2013 Car of the Year and is ranked best in class in every category for electric sedans (Wu 2023). Between 2015 to 2017, with more than 107,000 vehicles on the road worldwide, Tesla’s product line expanded to include the Model X, a crossover vehicle that entered volume production at the end of 2015, and the Model 3, a lower-priced vehicle released in 2017. Most recently, Tesla released the Model Y, a compact sport utility vehicle. However, Tesla does not limit its vision to only automobiles. The company “designs, develops, manufactures, sells and leases high-performance fully electric vehicles and energy generation and storage systems” (Tesla, Inc. 2023a, 4). Further, their sustainable mission has started to generate real impact on the environment, e.g., in 2022 their “customers avoided releasing about 13.4 million metric tons of CO<sub>2</sub>e into the atmosphere” (Tesla, Inc. 2022, 23).

Tesla has revolutionized the automobile industry in many ways. In addition to proving that all-electric vehicles can perform as well, if not better than, gas-powered vehicles, Tesla has challenged the conventional approach of how vehicles are sold. Rather than selling through dealership franchises, Tesla sells and services its vehicles through its own network, including acceptance of online orders. Due to widespread publicity and generally positive reviews of the vehicles, Tesla has enjoyed greater demand for its vehicles than it can fulfill. As such, the company collects deposits from customers at the time they place an order for a vehicle and, in some

locations, at certain additional milestones up to the point of delivery. In addition, a closer look at Tesla's income statement reveals that Tesla sells much more than just cars. Tesla also earns revenue from related services, including access to its Supercharging network, and software updates on the vehicles. Tesla also earns revenue from the sale of regulatory credits from energy tax credits and from the sale of components to other manufacturers. Lastly, Tesla earns revenue from "Tesla Energy," a division of the company offering battery-powered energy solutions for home, businesses, and utilities (Tesla, Inc. 2023a). Tesla's income statement and balance sheet for the past three years are presented in Exhibit 1 panel A and B, respectively.

## EXHIBIT 1 Financial Statements

### Panel A: Tesla, Inc. Income Statement

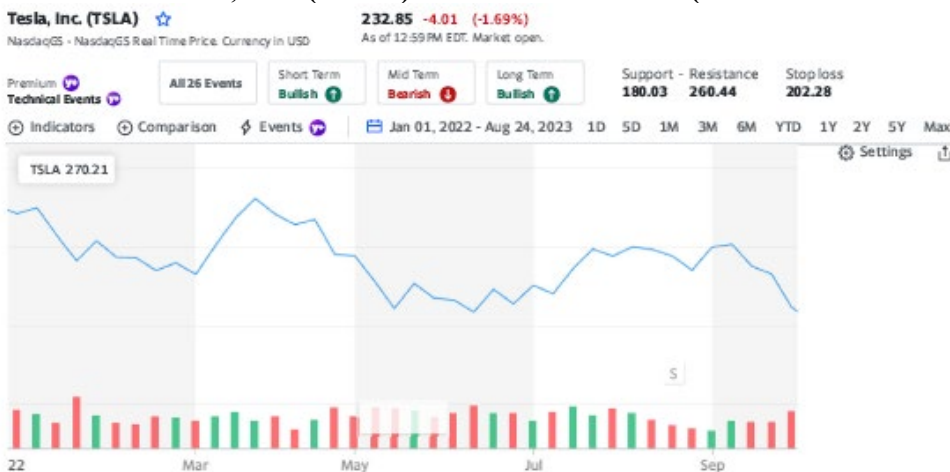
<u>Millions of US\$</u>	<u>12/31/2022</u>	<u>change</u>	<u>12/31/2021</u>	<u>change</u>	<u>12/31/2020</u>	<u>change</u>
Revenues						
Automotive sales	71,462	51.3%	47,232	73.4%	27,236	30.8%
Energy generation and storage	3,909	40.2%	2,789	39.9%	1,994	30.2%
Services and other	6,091	60.2%	3,802	64.9%	2,306	3.6%
Total revenues	81,462	51.4%	53,823	70.7%	31,536	28.3%
Cost of Sales						
Automotive sales	51,108	53.1%	33,393	64.8%	20,259	23.5%
Energy generation and storage	3,621	24.1%	2,918	47.7%	1,976	47.4%
Services and other	5,880	50.5%	3,906	46.2%	2,671	-3.6%
Total cost of revenues	60,609	50.7%	40,217	61.5%	24,906	21.4%
<b>Gross profit (loss)</b>	<b>20,853</b>	<b>53.3%</b>	<b>13,606</b>	<b>105.2%</b>	<b>6,630</b>	<b>62.9%</b>
Research & development	3,075	18.6%	2,593	73.9%	1,491	11.0%
Selling, general & administrative	3,946	-12.6%	4,517	43.6%	3,145	18.9%
Other operating income/expense	176	751.9%	(27)	100.0%	-	-100.0%
Total operating expenses	7,197	1.6%	7,083	52.8%	4,636	12.0%
<b>Operating income</b>	<b>13,656</b>	<b>109.4%</b>	<b>6,523</b>	<b>227.1%</b>	<b>1,994</b>	<b>2989.9%</b>
Total non-operating income/ expense	63	135.0%	(180)	-78.6%	(840)	-40.9%
<b>Pre-tax income</b>	<b>13,719</b>	<b>116.3%</b>	<b>6,343</b>	<b>449.7%</b>	<b>1,154</b>	<b>273.5%</b>
Income taxes	1,132	61.9%	699	139.4%	292	165.5%
<b>Income after taxes</b>	<b>12,587</b>	<b>123.0%</b>	<b>5,644</b>	<b>554.8%</b>	<b>862</b>	<b>211.2%</b>
EBITDA	17,403	84.5%	9,434	118.6%	4,316	107.0%
EBIT	13,656	109.4%	6,523	227.1%	1,994	2989.9%
Basic shares outstanding	3,130	5.8%	2,959	5.8%	2,798	5.1%
Shares outstanding	3,475	2.6%	3,386	4.2%	3,249	22.1%
Basic EPS	\$4.02	115.0%	\$1.87	648.0%	\$0.25	175.8%
EPS	\$3.62	122.1%	\$1.63	676.2%	\$0.21	163.6%
Number of full-time employees	127,855		99,290		70,757	

## Panel B: Tesla, Inc. Balance Sheet

In Millions of US\$	12/31/2022	change	12/31/2021	change	12/31/2020	change
<b>Assets</b>						
Cash & cash equivalents	16,253	-8%	17,576	-9%	19,384	209%
Shorter-term investments	5,932	4,428%	131	100%	-	0%
Accounts receivable	2,952	54%	1,913	1%	1,886	42%
Inventory	12,839	123%	5,757	40%	4,101	15%
Prepays & other current assets	2,941	71%	1,723	28%	1,346	40%
<b>Total current assets</b>	<b>40,917</b>	<b>51%</b>	<b>27,100</b>	<b>1%</b>	<b>26,717</b>	<b>121%</b>
Property & equipment, net	29,037	18%	24,649	32%	18,726	13%
Goodwill & other intangible assets	409	-11%	457	-12%	520	-3%
Other long-term assets	11,975	21%	9,925	60%	6,185	20%
<b>Total long-term assets</b>	<b>41,421</b>	<b>18%</b>	<b>35,031</b>	<b>38%</b>	<b>25,431</b>	<b>-26%</b>
<b>Total assets</b>	<b>82,338</b>	<b>33%</b>	<b>62,131</b>	<b>19%</b>	<b>52,148</b>	<b>12%</b>
<b>Liabilities</b>						
Accounts payable	15,255	52%	10,025	66%	6,051	60%
Accrued liabilities	7,142	25%	5,719	48%	3,855	20%
Deferred revenue, current portion	1,747	21%	1,447	-1%	1,458	25%
Customer deposits	1,063	15%	925	23%	752	4%
Current portion of debt & finance leases	1,502	-5%	1,589	-25%	2,132	19%
<b>Total current liabilities</b>	<b>26,709</b>	<b>36%</b>	<b>19,705</b>	<b>38%</b>	<b>14,248</b>	<b>34%</b>
Debt & finance leases, net of current	1,597	-70%	5,245	-45%	9,556	-18%
Deferred revenue, net of current	2,804	37%	2,052	60%	1,284	6%
Other long-term liabilities	5,330	50%	3,546	6%	3,330	24%
<b>Total liabilities</b>	<b>36,440</b>	<b>19%</b>	<b>30,548</b>	<b>7%</b>	<b>28,418</b>	<b>8%</b>
Commitment & contingencies	409	-28%	568	-13%	655	2%
<b>Equity</b>						
Common stock	3	0%	3	200%	1	0%
Additional paid-in capital	32,177	8%	29,803	9%	27,260	114%
Accumulated other comp income (loss)	(361)	-769%	54	-85%	363	-1108%
Retained earnings (accumulated deficit)	12,885	3,816%	329	-106%	(5,399)	-11%
<b>Total stockholders' equity (deficit)</b>	<b>44,704</b>	<b>48%</b>	<b>30,189</b>	<b>36%</b>	<b>22,225</b>	<b>236%</b>
Noncontrolling interests	785	-5%	826	-3%	850	0%
<b>Total liabilities &amp; equity</b>	<b>82,338</b>	<b>33%</b>	<b>62,131</b>	<b>19%</b>	<b>52,148</b>	<b>52%</b>

Tesla launched an initial public offering in June of 2010, raising \$226 million in equity. At the time, the company employed less than a thousand employees and had less than \$150 million in revenue. The company has since experienced rapid growth, while experiencing “high highs and low lows” (Thompson, Lee, and Levin 2022). Over the past five years, revenues have grown 591 percent from \$11.8 billion in 2017 to \$81.5 billion in 2022. After several years of trading between \$22 and \$33 per share, Tesla’s stock price hit an all-time high of \$414.50 on November 1, 2021. The stock was fairly volatile in 2022, starting the year at \$382.58 and dropping as low as \$118.47 to close out the year. Exhibit 3 provides Tesla, Inc.’s stock performance for the period 1/1/2022 to 8/23/2023.

### EXHIBIT 3 Tesla, Inc. (TSLA) Stock Performance (01/01/2022-08/24/2023)



**Note:** Stock chart from Yahoo Finance

#### ***Tesla's Leadership***

Tesla, Inc. is led by CEO and co-founder Elon Musk. Mr. Musk made his fortune as a co-founder of PayPal, which was acquired by eBay in 2002 for \$1.4 billion. He is also the CEO, and chief engineer of Space Exploration Technologies, better known as SpaceX, a company that aims to develop the world's first private spacecraft for commercial space travel, and more recently became owner and CTO of Twitter (now X Corp.), an online social media and social networking service. A self-made man and serial entrepreneur, Mr. Musk's innovations and charisma have earned him the reputation as a "real-life Iron Man" in reference to the Marvel Comics super hero (Smith 2014).

Mr. Musk is known for his bold vision and his even bolder proclamations. In a live interview in 2009, he called a *New York Times* journalist that wrote a critical review of Tesla an "idiot" (<https://www.youtube.com/watch?v=ajP3B0gYJlo>); see also, <http://www.businessinsider.com/elon-musk-calls-times-writer-a-huge-douchebag-and-an-idiot-video-2009-4>). In an early 2015 earnings call with analysts, Mr. Musk also declared that he thought Tesla's market capitalization could rival Apple's \$700 billion in the next ten years, which would be more than the market capitalizations of Ford, GM, Honda, Toyota, BMW, and Mercedes Benz combined. Mr. Musk made this declaration in the face of production delays, weakening market conditions, and falling gas prices, which has traditionally made the sale of electric cars more difficult.

Tesla's future prospects appear to depend on Mr. Musk's ability to continue to achieve feats that other carmakers would never dream of. As an incentive for him to make his bold vision a reality, Tesla's Board of Directors granted 304.0 million stock options awards to Mr. Musk that will "vest" or become available to him to exercise based on his ability to attain operational milestones related to annualized revenue and annualized adjusted EBITDA (Tesla, Inc. 2023a).

In addition to overseeing Mr. Musk's plans and providing the company with guidance, Tesla's Board of Directors is tasked with protecting the interests of Tesla's stockholders, including the responsibility for risk oversight. Following best practices for corporate governance, Tesla's guidelines suggest that the majority of Tesla's directors be "outsiders," meaning non-company employees, and it has a standing Audit Committee to whom both internal and external auditors report directly (Tesla, Inc. 2021). Some have raised concerns, however, about whether Tesla's

board is as independent as it appears. CtW Investment Group, which works with union-based pension funds and holds 200,000 shares of Tesla, called on the company to separate the Chairman of the Board and CEO roles (Musk held both until 2018) and to prohibit immediate family members from serving on the board (Sage 2016). Mr. Musk's brother, Kimbal Musk, currently serves on the boards of both Tesla and SpaceX. Board member JB Straubel is also a former co-founder and Chief Technology Officer of Tesla and previously served on the board of SolarCity, Mr. Musk's related company. Tesla's board recently returned \$735 million in stock and cash to settle an investor lawsuit claiming that certain directors were grossly overpaid (Feeley and Bloomberg 2023).

### ***Tesla's Employee Culture***

Tesla's culture has been described as "high risk, high reward," and the company prides itself on operating like an internet startup, despite being a public company (Fehrenbacher 2015). Employees regularly work long hours and the atmosphere has been described as a "modern day sweatshop" (Levin 2022). Nevertheless, Tesla has a highly diverse employee base with 67 percent of U.S. employees from underrepresented minority groups (Tesla, Inc. 2023b). Tesla follows a similar strategy as Amazon to drive innovation, including no short-term incentives, low salaries, and large endowments of company stock with a long performance period and a singular performance metric – stock price. To drive company culture Musk encourages keeping meeting sizes small, employing skip-level meetings, empowering employees to do their jobs how they deem fit, and giving employees a lot of responsibility and trust with expectations that each employee is exceptional. While the environment may be one of high pressure for employees, many likely enjoy working in the innovative and mission-driven environment Tesla promotes. In 2022, Tesla employed over 127,000 workers and received over 3.6 million applicants for open positions (Tesla, Inc. 2023b).

### ***Challenges for Tesla and Its Future***

Despite the company's rapid growth and popularity, Tesla has also experienced a number of setbacks. The company has struggled to reach desired production levels, resulting in lengthy delays for customers, most notably delays in the release of its Cybertruck. Tesla's long-term success is anyone's guess. In December 2014, Morgan Stanley's auto analyst Adam Jonas predicted Tesla would fall short by 40 percent of its goal to produce 500,000 cars by 2020, but Tesla exceeded its goal by 2 percent, producing 510,000 cars by Q4 2020 (Wu 2023). However, the electric car market is growing rapidly with competitors, such as BMW, Mercedes Benz, and General Motors, developing all-electric alternatives and boasting much higher production and distribution capabilities than Tesla (see peer comparisons <https://seekingalpha.com/symbol/TSLA/peers/comparison?compare=TSLA,TM,MBGAF,BMWYY,RACE,STLA>).

Moreover, Tesla has been plagued with lawsuits and complaints in recent years, including a racial bias lawsuit in California, an accusation from California's Department of Motor Vehicles that Tesla misrepresented the effectiveness and safety of its auto pilot and full self-driving features, the compensation of its' directors, unfair price hikes related to its Tesla Solar Roof product, and an antitrust suit alleging the carmaker monopolized repairs (Medithi 2023). Most notably, a Reuters special report brought to light Tesla's "rosy range projections" and a "secret team" to suppress thousands of driving range complaints. The automaker became inundated with customer complaints that their batteries were significantly underperforming compared to both advertisements and dashboard projections. As a result, Tesla built a team in Las Vegas charged with canceling as many range-related appointments as possible, closing hundreds of cases a week.

The article notes, “They've gotten really good at exploiting the rule book and maximizing certain points to work in their favor involving Environmental Protection Agency tests. The practice can misrepresent what their customers will experience with their vehicles” (Stecklow and Shirouzu 2023).

Despite these challenges, Tesla has big plans for the future of its business. With the popularity of Tesla’s vehicles continuing to climb, the company has vastly expanded its operations. In 2021, Tesla officially moved its headquarters from Silicon Valley to its’ Gigafactory in Austin, TX. Among recent expansions, Tesla opened its third factory near Berlin, Germany to build Model Y SUVs for the European market, and is continuing to expand the factory to begin building batteries. Following closely, Tesla opened its fourth factory in Austin, TX to make its Model Y vehicles and plans to expand production at this factory to include the Cybertruck. While expansion is ongoing, Tesla cut ten percent of its’ salaried workforce in June 2022 amid the broader global economic downturn (Forbes.com 2022).

According to the company’s 2022 annual report, Tesla plans to continue expanding production worldwide. The company is focused on growing its manufacturing capacity, including ramping up production to its’ installed production capacities while increasing the production rate, efficiency, and capacity at its’ current factories. The company notes that, this next phase of production growth depends on the ramp up at Gigafactory Berlin-Brandenburg and Gigafactory Texas, as well as Tesla’s ability to add to its available sources of battery cell supply by manufacturing its own cells with high-volume output, lower capital and production costs, and longer range (Tesla, Inc. 2023a). These bold expansion plans could put Tesla at the center of an energy revolution, or they could cause the company to implode under the weight of significant debt levels and even greater expectations.

### **Using the Fraud Triangle to Identify Fraud Risk Factors**

Auditing standards define fraud as an intentional act that results in a material misstatement in the financial reports (PCAOB 2016a). Research shows that fraud is more likely when three conditions are present: incentives or pressures, opportunities, and attitudes or rationalizations. These three conditions are known collectively as the “fraud triangle” (Cressey 1953). Auditors use the fraud triangle as a tool to help identify areas of risk during the fraud risk brainstorming process. These risks are referred to as *fraud risk factors*. The next section describes each of the three conditions in more detail and provides examples from recent research of how each condition is linked with fraud.

The first leg of the fraud triangle is *incentives* or *pressures*. This condition is present whenever management and/or employees have incentives or are under pressures to commit fraud (Arens, Beasley, and Alvin 2010). Research shows that when management compensation is tied to earnings and/or stock performance (e.g., bonuses, stock options) the likelihood of fraud is higher (Healy and Wahlen 1999; Fields, Lys, and Vincent 2001). Other incentives besides greed can also contribute to fraud risk. A recent study finds that CFOs may become involved in deceptive accounting practices not for personal financial gain, but rather to appease their CEOs and protect their jobs (Feng, Ge, Luo, and Shevlin 2011). Performance pressures also cause managers and employees to engage in fraud. A recent survey finds that 64 percent of employees engage in unethical behavior because they feel pressure to “do whatever it takes” to meet business targets (KPMG 2013). Changes in the external environment, such as declines in customer demand, increased competition, or new regulations can threaten the financial stability of a firm and create pressure to “cook the books” and create the appearance of success while the firm attempts to adapt

to the environmental changes. Paradoxically, both high performing firms (e.g., MacLean 2008; Mishina, Dykes, Block, and Pollock 2010) and low performing firms (e.g., Harris and Bromiley 2007; Zhang, Bartol, Smith, Pfarrer, and Khanin 2008) have higher risks of financial statement fraud, because both situations put pressure on executives to meet or exceed last period's earnings. Managers at poorly performing firms may also feel pressure to manipulate earnings or inflate asset balances in order to meet debt covenant requirements and avoid defaulting on loans.

The second leg of the fraud triangle is *opportunities*. This condition is present whenever circumstances allow management or employees to commit and conceal fraudulent behavior (Arens et al. 2010). Many different factors create opportunities for fraud. The use of significant accounting estimates creates opportunities for earnings management and fraud, especially in the area of reserves, allowances, and depreciation (PCAOB 2016c). Difficulty in verifying estimates and valuations also create opportunities for manipulation, particularly in areas such as intangible assets and level three fair market valuations (PCAOB 2016d). In addition, fraud risks are higher when internal controls are weak or ineffective, when company policies are ambiguous or enforced unevenly, or when oversight of financial reporting is inadequate, as all of these circumstances make it easier to commit and conceal fraudulent activity. Finally, transactions and financial relationships with related parties can create opportunities to commit and conceal fraud (PCAOB 2016b).

The last leg of the fraud triangle is *attitudes* or *rationalizations*. This condition is present whenever management or employees exhibit an attitude, character, or set of ethical values that would enable committing a dishonest act (i.e., "bad apples") or whenever the environment imposes sufficient pressure on management or employees to cause good people to rationalize engaging in bad behavior (i.e., "bad barrels") (Treviño and Youngblood 1990; Arens et al. 2010). Auditors should be alert to the risk of bad apples where management has a history of being dishonest, for violating laws and regulations, or a reputation for making overly aggressive or unrealistic forecasts. In these circumstances, auditors should be skeptical of management's integrity and the veracity of their statements. Auditors also need to identify circumstances where good people may be tempted to make bad choices. Under the right pressures, managers and employees can rationalize fraudulent activity as acceptable or even necessary, and thus disengage from the feelings of guilt and regret that normally prevent people from behaving dishonestly. For example, management might rationalize financial statement fraud if the act prevents the loss of jobs or the closure of the business. Employees can also rationalize stealing from a company as "getting what they are due" if they feel underpaid or under-appreciated. Finally, managers might rationalize committing fraud if they suspect that competitors are doing the same.

Detecting rationalization risks can be difficult, but auditors should be alert for potential indicators such as the use of euphemistic language, social norms in the company and/or industry that treat dishonesty as a part of doing business, and the tone at the top set by the company's CEO. A CEO that explicitly values ethics and honesty and emphasizes not only results but also the just means used to reach those results can foster ethical choices, whereas a CEO who is perceived as unethical or even ethically neutral can foster an environment where fraud is more easily rationalized (Treviño, Hartman, and Brown 2000).

By examining fraud risk factors through the three legs of the fraud triangle, auditors may develop more accurate fraud risk assessments and become better prepared to alter the nature, timing, and extent of their audit procedures to respond to these identified risks.



## Part I Case Requirements: Identifying Fraud Risk Factors

You should work in your teams to complete responses to each of the assigned case requirement questions using the information on Tesla, Inc. provided above and, where noted, in the case supplements, available for download in Appendix A. Your responses should be completed before proceeding to Part II.

### 1. *Fraud risks related to Tesla's culture, leadership, and governance structure*

- a) How would you describe the “tone at the top” set by Tesla’s leader, Elon Musk? How do Mr. Musk’s leadership style and his “tone at the top” contribute to possible fraud risk at Tesla, Inc.?
- b) How would you describe the company’s culture? How might this culture create pressures and rationalizations for fraud?
- c) Review Tesla’s Code of Business Conduct and Ethics (see <https://digitalassets.tesla.com/tesla-contents/image/upload/IR/business-code-of-ethics>). How might any potential weaknesses in this code contribute to fraud risk at this company?
- d) Describe some possible concerns with Tesla’s board of directors. How might these concerns create opportunities and rationalizations for fraud?

### 2. *Fraud risks related to Tesla's incentive structures and stock performance*

- a) To what extent are executives and employees incentivized with shares and stock options (see Tesla’s 2022 Annual Report Item 8 Financial Statements and Supplementary Data section, Note 13: <https://www.sec.gov/Archives/edgar/data/1318605/000095017023001409/tsla-20221231.htm>)? How do these pay structures create pressures/incentives for fraud?
- b) Review Tesla’s stock performance over the last two years (see Exhibit 3). What fraud pressures does this stock performance create?

### 3. *Fraud risks related to revenue recognition at Tesla*

- a) What does Tesla sell and how does the company account for revenue, accounts receivable, and COGS (see Tesla’s 2022 Annual Report, Item 1 Business, Item 7 MD&A, and Item 8 Financial Statements and Supplementary Data, Note 2: <https://www.sec.gov/Archives/edgar/data/1318605/000095017023001409/tsla-20221231.htm>)?
- b) How might these revenue recognition practices create opportunities, incentives, and/or rationalizations for fraud?

### 4. *Fraud risks related to Tesla's business and operating conditions*

- a) Review the business risks disclosed by the company (see Tesla’s 2022 Annual Report, Item 1A Risk Factors and Item 8 Financial Statements and Supplementary Data, Note 2 and Note 15: <https://www.sec.gov/Archives/edgar/data/1318605/000095017023001409/tsla-20221231.htm>). How might some of these business risks from the external environment also create fraud risks within Tesla?
- b) What related party transactions support Tesla’s financial performance (see Tesla’s 2022 Annual Report, Item 8 Financial Statements and Supplementary Data, Note 17)? How might these transactions create opportunities for fraud?

### 5. *Fraud risks indicated by the results of preliminary analytical procedures*

- a) What fraud risks may be indicated by the year-to-year comparisons of Tesla's financial statements (see Exhibits 1 and 2)?
- b) How does the company perform relative to its peers (see <https://seekingalpha.com/symbol/TSLA/peers/comparison?compare=TSLA,TM,MBGAF,BMWYY,RACE,STLA>)? Do these ratios and trends seem reasonable? Be sure to consider key metrics including Profitability (i.e., Revenue Growth, Gross margin, Return on Assets, Asset turnover), Debt management (i.e., Debt to equity), and Liquidity (i.e., Quick ratio, Current ratio).

## PART II

### **Fraud Brainstorming Session Best Practices**

Brainstorming refers to an idea-generation process in which multiple participants share and explore their thoughts on a particular topic. The brainstorming approach is advantageous in that the process can help participants identify and synergize multiple ideas and perspectives in a relatively short amount of time. However, the process is not always effective, and brainstorming sessions may fail to deliver quality results for a number of reasons. Participants may consciously or unconsciously engage in “social loafing” and hesitate to share their ideas, because they think their efforts are either less important or less identifiable (Latané, Williams, and Harkins 1979). Research shows that inexperienced auditors may be especially prone to social loafing when working in a group setting, which may cause them to produce significantly fewer and less well-developed mental simulations of possible fraud schemes (Chen, Trotman, and Zhou 2014). Fraud brainstorming sessions may also suffer process losses from “production blocking,” a phenomenon whereby participants lose an idea while waiting their turn and listening to others (Diehl and Stroebe 1987). Brainstorming sessions can also deteriorate due to “groupthink,” a phenomenon where a group coalesces on a single perspective rather than considering multiple ideas or points of view (Beasley and Jenkins 2003).

To minimize these obstacles to effective fraud risk brainstorming, groups should use content facilitation techniques, such as prompts, to stimulate idea generation (Lynch, Murthy, and Engle 2009). The case requirements you completed in Part I of this case are examples of the types of prompts used by auditors in actual fraud risk brainstorming sessions. To minimize the risks of groupthink and production blocking, auditors commonly work individually to develop a list of fraud risks *prior* to joining the brainstorming session, spending five hours on average to prepare for each session (Dennis and Johnstone 2016). Brainstorming sessions can also be enhanced by following best practices (see Brazel, Carpenter, and Jenkins (2010) for a recent field study of fraud risk brainstorming activities in audit firms). These best practices include a brainstorming session that:

- a) is led by a partner or forensic specialist;
- b) includes an IT audit specialist;
- c) is held early in the audit process (pre-planning or audit planning stage);
- d) includes extensive discussion about how management might perpetrate fraud;
- e) includes extensive discussion about audit responses to fraud risk;
- f) includes significant contributions from managers on the audit team; and

g) includes significant contributions from the audit partner.

### Responding to Assessed Fraud Risks

In addition to using the concept of the fraud triangle as a tool to identify fraud risks, auditors may work in their fraud risk brainstorming sessions to create a fraud risk matrix to help them better identify and respond to assessed fraud risks. A fraud risk matrix is a tool that helps auditors connect identified fraud risk factors with possible fraud schemes and the account balances that may be affected. The fraud risk matrix allows auditors to make a preliminary assessment of the likelihood and significance of such a scheme occurring at their client so they may adapt the nature, timing, and extent of their planned audit procedures to respond to the more likely and/or more significant identified fraud risks. Exhibit 4 provides an example of a fraud risk matrix.

#### EXHIBIT 4 Sample Fraud Risk Matrix

Fraud Risk Factor	Possible Fraud Schemes	Balances Affected	Likelihood of Fraud	Significance of Fraud
<b>Weak control environment in procurement creates opportunities for fraud</b>	<ol style="list-style-type: none"> <li>Unauthorized purchases</li> <li>Use of shell companies</li> <li>Employee kickbacks</li> </ol>	<ul style="list-style-type: none"> <li>Cash</li> <li>Inventory</li> <li>PP&amp;E</li> <li>SG&amp;A</li> </ul>	Moderate	Moderate
<b>Competitive culture in sales fosters rationalizations for fraud</b>	<ol style="list-style-type: none"> <li>Premature revenue recognition</li> <li>Fictitious sales</li> <li>Side agreements</li> </ol>	<ul style="list-style-type: none"> <li>Sales</li> <li>A/R</li> <li>Allowance for Bad Debt</li> <li>Returns</li> </ul>	Low	High
<b>Recent layoffs in manufacturing create rationalizations for fraud</b>	<ol style="list-style-type: none"> <li>Ghost employees</li> <li>False time reports</li> </ol>	<ul style="list-style-type: none"> <li>Payroll</li> <li>Inventory unit costs</li> </ul>	High	Low
<b>Use of bonuses and stock options tied to net income creates incentives for fraud</b>	<ol style="list-style-type: none"> <li>Inflated or fictitious sales</li> <li>Premature revenue recognition</li> <li>Capitalizing expenses</li> </ol>	<ul style="list-style-type: none"> <li>Sales</li> <li>SG&amp;A</li> <li>PP&amp;E</li> </ul>	High	High
<b>Threat of bankruptcy creates pressures for fraud</b>	<ol style="list-style-type: none"> <li>Undisclosed factoring of A/R</li> <li>Manipulation of current ratio</li> <li>Misclassifying assets</li> <li>Failure to recognize declines in asset values</li> </ol>	<ul style="list-style-type: none"> <li>A/R</li> <li>Investments</li> <li>Other current assets</li> <li>Current liabilities</li> </ul>	High	High

Auditing standards note that determining the nature, timing, and extent of planned audit procedures is a matter of professional judgment. When the likelihood and/or significance of material misstatement due to fraud or error is high, the auditor should respond by planning audit

procedures that will increase both the quality – that is, the reliability and relevance – and the quantity of the evidence collected (AICPA 2006). For example, when the likelihood of a particular fraud scheme is low and the significance is low (e.g., employees being paid for unworked overtime when little to no overtime was reported in the year), the audit team may decide that inquiries of associated personnel are sufficient to determine whether evidence of a material misstatement exists for the account balances affected by such a scheme. When the likelihood of a particular fraud scheme is high, but the significance is low (e.g., employees submitting false travel expense reimbursement claims for amounts not requiring a receipt), the audit team may respond with additional procedures beyond inquiries of personnel to include both tests of controls and analytical procedures, and determine if additional substantive procedures are needed as this evidence is evaluated. However, when the potential significance of a fraud scheme is high even when the likelihood may be low (e.g., members of management colluding to overstate revenue), auditors should plan for more substantive testing. Substantive testing can include observing and/or re-performing significant transactions, recalculating balances, obtaining third-party confirmations, and making physical inspections of assets and records. In response to increased risks of fraud, the timing of testing may also be adjusted to perform more testing near period end rather than at an interim date.

Once the fraud risk brainstorming session is complete, a member of the team is designated to document the results of the session, these include: the identified fraud risks, the potential fraud schemes and the balances that would be affected, the group's assessment of the likelihood and significance of such schemes occurring, and the plan for adapting the nature, timing, and/or extent of audit procedures to respond to this fraud risk assessment. This documentation may take the form of a memorandum that is added to the audit file.

## APPENDIX A

Tesla, Inc.'s 2022 Annual Report (10-K):

<https://www.sec.gov/Archives/edgar/data/1318605/000095017023001409/tsla-20221231.htm>

Tesla, Inc.'s Code of Business Conduct and Ethics: <https://digitalassets.tesla.com/tesla-contents/image/upload/IR/business-code-of-ethics>

Corporate Governance Information and Documents: <https://ir.tesla.com/corporate>

Tesla, Inc.'s Peer Comparison Information:

<https://seekingalpha.com/symbol/TSLA/peers/comparison?compare=TSLA,TM,MBGAF,BMW,YY,RACE,STLA>

**APPENDIX B**

**Memo Template to Document the Results of a Fraud Brainstorming Session**

**Date:** [DATE OF SESSION]

**Participants:** [NAME OF ALL SESSION PARTICIPANTS]

**Length of Session:** [TIME IN HOURS\_MINUTES]

**Purpose of the Session:** [FILL IN]

**Part A – Assessment of Fraud Risks:**

Fraud Risk Factor	Possible Fraud Schemes	Balances Affected	Likelihood of Fraud	Significance of Fraud
	1.	•		
	1.	•		
	1.	•		
	1.	•		
	1.	•		

**Part B - Overall Fraud Risk Assessment:**

As a group, how would you rate the overall potential of a risk of material misstatement due to fraud at this client (e.g., low risk, moderate risk, or high risk)? Provide justification for your assessment and note any dissension about this assessment among the team members, if applicable.

**Part C – Planning the Nature, Timing, and Extent of Procedures:**

Based on the identified fraud risk factors and the level of assessed fraud at this client, how would your group modify the nature, timing, and/or extent of the planned audit procedures? Discuss at least three audit procedures that should be performed on this audit in response to the fraud risk factors identified above. Your group should try to be as specific as possible (i.e., the account(s) that you would focus on, the procedure(s) you may perform, and when you would perform the procedure).

- 1)
- 2)
- 3)

## REFERENCES

- American Institute of Certified Public Accountants (AICPA). 2006. *Consideration of fraud in a financial statement audit*. AU Section 316.
- Arens, I. R. J., M. S. Beasley III, and A. Alvin. 2010. *Auditing and Assurance Services: An Integrated Approach-13/E*. Pearson Prentice Hall: New Jersey.
- Association of Certified Fraud Examiners (ACFE). 2016. *Report to the Nations on Occupational Fraud and Abuse*. Available at: <http://www.acfe.com/rtnn2016/docs/2016-report-to-the-nations.pdf>
- Beasley, M. S., and J. G. Jenkins. 2003. A primer for brainstorming fraud risks. *Journal of Accountancy*, 196(6), 32.
- Brazel, J. F., T. D. Carpenter, and J. G. Jenkins. 2010. Auditors' use of brainstorming in the consideration of fraud: Reports from the field. *The Accounting Review* 85 (4): 1273-1301.
- Carpenter, T. D. 2007. Audit team brainstorming, fraud risk identification, and fraud risk assessment: Implications of SAS No. 99. *The Accounting Review* 82 (5): 1119-1140.
- Centre for Audit Quality (CAQ). 2010. *Report on Deterring and Detecting Financial Reporting Fraud: A Plan for Action*. Available at: <http://www.thecaq.org/deterring-and-detecting-financial-reporting-fraud>
- Chen, C. X., K. T. Trotman, and F. Zhou. 2014. Nominal versus interacting electronic fraud brainstorming in hierarchical audit teams. *The Accounting Review* 90 (1): 175-198.
- Cressey, D. R. 1953. *Other people's money; a study of the social psychology of embezzlement*. Free Press: University of Michigan.
- Dennis, S. A., and K. M. Johnstone. 2016. A Field Survey of Contemporary Brainstorming Practices. *Accounting Horizons* 30 (4): 449-472.
- Diehl, M., and W. Stroebe. 1987. Productivity loss in brainstorming groups: Toward the solution of a riddle. *Journal of Personality and Social Psychology* 53 (3): 497-509.
- Fehrenbacher, K. 2015. Tesla's startup culture has big risks and rewards. *Fortune.com*. Available at: <http://fortune.com/2015/08/21/teslas-startup-culture-musk/>
- Feely, J. and Bloomberg. 2023. Tesla's board will return \$735 million in stock and cash to settle claims directors were grossly overpaid. *Fortuner*. (July 18). <https://fortune.com/2023/07/18/tesla-board-return-735-million-stock-cash-settle-claims-directors-grossly-overpaid/>
- Feng, M., W. Ge, S. Luo, and T. Shevlin. 2011. Why do CFOs become involved in material accounting manipulations? *Journal of Accounting and Economics* 51 (1): 21-36.
- Fields, T. D., T. Z. Lys, and L. Vincent. 2001. Empirical research on accounting choice. *Journal of Accounting and Economics* 31 (1): 255-307.
- Forbes.com. 2022. Tesla: A history of innovation (and headaches). *Forbes*. (September 29) Available at: <https://www.forbes.com/sites/qai/2022/09/29/tesla-a-history-of-innovation-and-headaches/?sh=a5bc84618735>
- Harris, J., and P. Bromiley. 2007. Incentives to cheat: The influence of executive compensation and firm performance on financial misrepresentation. *Organization Science* 18 (3): 350-367.
- Healy, P. M., and J. M. Wahlen. 1999. A review of the earnings management literature and its implications for standard setting. *Accounting Horizons* 13 (4): 365-383.
- International Federation of Accountants (IFAC). 2008. *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements*. IAS 240. Available at: <http://www.ifac.org/system/files/downloads/a012-2010-iaasb-handbook-isa-240.pdf>

- KPMG. 2013. *Integrity Survey 2013*. Available at: <https://home.kpmg.com/cn/en/home/insights/2009/12/integrity-survey-2013-o-201307.html>
- Latané, B., K. Williams, and S. Harkins. 1979. Many hands make light the work: The causes and consequences of social loafing. *Journal of Personality and Social Psychology* 37 (6): 822-832.
- Levin, B. 2022. A reminder of just some of the terrible things Elon Musk has said and done. *Vanity Fair*. (April 26). Available at: <https://www.vanityfair.com/news/2022/04/elon-musk-twitter-terrible-things-hes-said-and-done>
- Lynch, A. L., U. S. Murth, and T. J. Engle. 2009. Fraud brainstorming using computer-mediated communication: The effects of brainstorming technique and facilitation. *The Accounting Review* 84 (4): 1209-1232.
- MacLean, T. L. 2008. Framing and organizational misconduct: A symbolic interactionist study. *Journal of Business Ethics* 78 (1-2): 3-16.
- Medithi, V. 2023. Tesla hit with another class action lawsuit, this time over driving range. *Investopedia*. August 3. Available at: <https://www.investopedia.com/tesla-hit-with-another-class-action-lawsuit-this-time-over-driving-range-7569325#:~:text=Tesla%20faces%20a%20number%20of,of%20its%20driving%20assistance%20systems.>
- Mishina, Y., B. J. Dykes, E. S. Block, and T. G. Pollock. 2010. Why “good” firms do bad things: The effects of high aspirations, high expectations, and prominence on the incidence of corporate illegality. *Academy of Management Journal* 53 (4): 701-722.
- PricewaterhouseCoopers (PwC). 2015. *Data driven: What students need to succeed in a rapidly changing business world*. Available at: <https://www.pwc.com/us/en/faculty-resource/assets/pwc-data-driven-paper-feb2015.pdf>
- Public Company Accounting Oversight Board (PCAOB). 2016a. *Consideration of fraud in a financial statement audit*. AS 2401.
- Public Company Accounting Oversight Board (PCAOB). 2016b. *Related parties*. AS 2410.
- Public Company Accounting Oversight Board (PCAOB). 2016c. *Auditing accounting estimates*. AS 2501.
- Public Company Accounting Oversight Board (PCAOB). 2016d. *Auditing fair value measurements and disclosures*. AS 2502.
- Ramos, M. 2003. Auditors’ responsibility for fraud detection. *Journal of Accountancy* 195 (1): 28-36.
- Sage, A. 2016. Tesla investor group wants more independent board, cites Musk ties. *Reuters*. (June 28). Available at: <http://www.reuters.com/article/us-solarcity-m-a-tesla-idUSKCN0ZE2ZL>
- Smith, A. 2014. Meet tech billionaire and real life Iron Man Elon Musk. *The Telegraph* (January 4). Available at: <http://www.telegraph.co.uk/technology/news/10544247/Meet-tech-billionaire-and-real-life-Iron-Man-Elon-Musk.html>
- Stecklow, S. and N. Shirouzu. 2023. Tesla created secret team to suppress thousands of driving range complaints. *Reuters*. (July 27). Available at: <https://www.reuters.com/investigates/special-report/tesla-batteries-range/#:~:text=driving%20range%20complaints-,Tesla%20created%20secret%20team%20to%20suppress%20thousands%20of%20driving%20range,recharge%2C%20a%20source%20told%20Reuters.>



- Tesla, Inc. 2021. *Corporate Governance Guidelines*. Available at: <https://digitalassets.tesla.com/tesla-contents/image/upload/IR-Corporate-Governance-Guidelines>
- Tesla, Inc. 2022. *Impact Report 2022*. Available at: [https://www.tesla.com/ns\\_videos/2022-tesla-impact-report-highlights.pdf](https://www.tesla.com/ns_videos/2022-tesla-impact-report-highlights.pdf)
- Tesla, Inc. 2023a. *Tesla, Inc. 2022 Annual Report*. Available at: <https://www.sec.gov/Archives/edgar/data/1318605/000095017023001409/tsla-20221231.htm>
- Tesla, Inc. 2023b. Tesla, Inc. Website. Available at: <https://www.tesla.com/impact/people> (last accessed August 31, 2023).
- Thompson, C., K. Lee, and T. Levin. 2023. Tesla history's most important moments, from its founders' launch to bringing EV mainstream. *Business Insider*. (June 22). Available at: <https://www.businessinsider.com/tesla-history-founders>
- Treviño, L. K., and S. A. Youngblood. 1990. Bad apples in bad barrels: A causal analysis of ethical decision-making behavior. *Journal of Applied Psychology* 75 (4): 378-385.
- Treviño, L. K., L. P. Hartman, and M. Brown. 2000. Moral person and moral manager: How executives develop a reputation for ethical leadership. *California Management Review* 42 (4): 128-142.
- Wu, A. 2023. The story behind Tesla's success. Investopedia. (May 27). Available at: <https://www.investopedia.com/articles/personal-finance/061915/story-behind-teslas-success.asp>
- Zhang, X., K. M. Bartol, K. G. Smith, M. D. Pfarrer, and D. M. Khanin. 2008. CEOs on the edge: Earnings manipulation and stock-based incentive misalignment. *Academy of Management Journal* 51 (2): 241-258.