



409A Valuation Case Study

Tech Corp is a fast-rising cloud storage startup known for its AI-powered data security solutions. It wants to issue stock options but before it does so, the Internal Revenue Service (IRS) requires it to get a 409A valuation.

Stock options are a type of nonqualified deferred compensation that is taxed as per Section 409A of the Internal Revenue Code (IRC). A valuation that complies with this section is referred to as a 409A valuation.

In this case, we applied the 409A valuation methodology to get the following results.

Before 409A Valuation		After 409A Valuation	
Price Per Share (Board Determined)	\$1	Fair Market Value (FMV) (409A Valuation)	\$0.302

Before beginning the 409A valuation process, it’s important to have a thorough understanding of the company.

Company Information

Tech Corp is a sophisticated software company launched in June 2023, offering cloud storage and AI-powered data security solutions. It excels in delivering AI-powered products that seamlessly integrate into everyday life, enhancing productivity, efficiency, and overall user experience.

One of Tech Corp’s products is its cloud-based storage tools, revolutionizing how businesses collaborate and communicate in today’s interconnected world. These tools provide everything from document management and project collaboration to communication and data analysis, helping organizations streamline their workflows and achieve optimal performance.

Furthermore, Tech Corp is invested in emerging technologies such as artificial intelligence, machine learning, and the Internet of Things (IoT), to develop solutions that drive innovation across industries.

Overall, Tech Corp is an example of innovation and excellence in the tech industry, continually pushing boundaries and redefining the digital landscape. With dedication, quality, creativity, and customer satisfaction, Tech Corp remains a trusted partner for businesses and consumers.

Capitalization Table

Equity	Shares	Capital	% Fully Diluted
Common	400,000	\$ –	100.00%
Total Fully Diluted Shares	400,000	\$ –	100.00%

Financial Statements

Let’s analyze the company’s financial position by reviewing the Income Statement and Balance Sheet.

Income statement

The Income Statement summarizes the company’s revenues, and expenses for a specific period as shown below.

The statement covers the last 12 months ending March 2025 and March 2024. Since the company launched in June 2023, it did not have revenue in first year of operations.

Income Statement For the Year Ended (\$)	March 2025	March 2024
Revenue		
Sales Revenue	75,000	-
Interest Income	25,000	-
Total Revenue	100,000	-
Operating Expenses		
Salaries and Wages	20,000	10,000
Rent and Utilities	10,000	10,000

Marketing and Advertising	7,000	5,000
R&D	9,000	20,000
Insurance	10,000	10,000
Other Operating Expenses	6,000	6,000
Total Operating Expenses	62,000	61,000
Net Operating Income	38,000	61,000
Other Income/ Expenses		
Other Income	20,000	10,000
Other Expenses	30,000	30,000
Net Other Income	10,000	20,000
Net Income	28,000	81,000

Balance sheet

The balance sheet provides the company’s financial position listing the assets, liabilities, and shareholders’ equity.

The company took on long-term debt in 2025, expecting significant growth in the upcoming months.

Balance Sheet For the Year Ended (\$)	March 2025	March 2024
Assets		
Current Assets		
Cash and Cash Equivalents	472,919	363,465
Accounts Receivable	11,000	9,000
Total Current Assets	483,919	372,465
Non-Current Assets		
Startup and Organizational Costs	2,586	2,586
Total Non-Current Assets	2,586	2,586
Total Assets	486,506	375,051
Liabilities		
Current Liabilities		
Accounts Payable	5,457	20,851
Short-term Loans	5,000	5,000

Accrued Expenses	20,000	20,000
Total Current Liabilities	30,457	45,851
Long-Term Liabilities		
Long-term Debt	12,700	–
Deferred Tax Liability	7,000	7,000
Total Long-Term Liabilities	19,700	7,000
Total Liabilities	50,157	52,851
Shareholders' Equity		
Opening Balance Equity	3,200	3,200
Retained Earnings	5,149	–
Shareholders' equity	400,000	400,000
Net Income	28,000	81,000
Total Shareholders' Equity	436,349	322,200
Total Liabilities and Shareholders' Equity	486,506	375,051

409A Valuation Process

409A valuation analyzes and estimates the fair market value (FMV) of a company’s common stock.

The valuation is necessary for compliance with Section 409a of the IRC, which regulates the taxation of non-qualified deferred compensation. Additionally, it enables employees to file an 83(B) election, minimizing tax liabilities and optimizing tax treatment on future gains.

Section 409A requires private companies to obtain a 409A valuation to determine their **common stock’s fair market value** (FMV) before granting stock options or other equity-based compensation.

Calculating The 409A Valuation

For a company like Tech Corp in the **early revenue stage**, the **asset-based approach in the form of the adjusted book value method** is applied in the valuation.

To understand things better, below is the unadjusted balance sheet of the company along with the adjustments made.

Balance Sheet As on March 2025 (\$)	Original	Adjustment	Adjusted
ASSETS			
Current Assets			
Cash and Cash Equivalents	472,919	–	472,919
Accounts Receivable	11,000	–	11,000
Total Current Assets	483,919	–	483,919

Non-Current Assets			
Startup and Organizational Costs	2,586	–	2,586
Intangible Asset	–	15,904	15,904
Total Non-current Asset	2,586	15,904	18,491
TOTAL ASSETS	486,506	15,904	502,410
LIABILITIES & EQUITY			
Current Liabilities			
Accounts Payable	5,457	–	5,457
Short-term Loans	5,000	–	5,000
Accrued Expenses	20,000	–	20,000
Total Current Liabilities	30,457	–	30,457
Long-term Liabilities			
Long-term Debt	12,700	–	12,700
Deferred Tax Liability	7,000	–	7,000

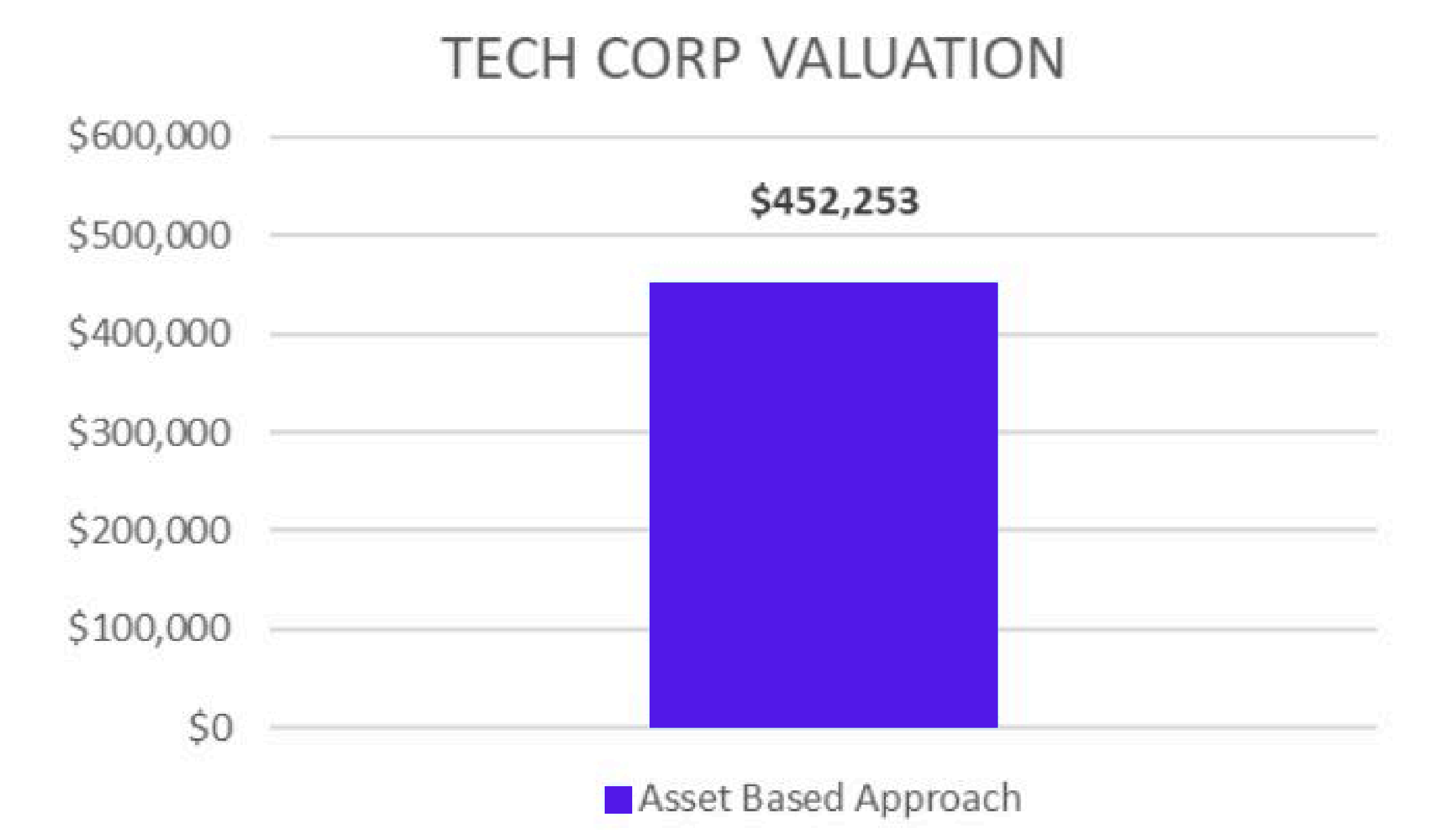
Long-term liabilities	19,700	–	19,700
Total Liabilities	50,157	–	50,157
Stockholders' Equity			
Opening Balance Equity	3,200	–	3,200
Retained Earnings	5,149	–	5,149
Shareholders' equity	400,000	–	400,000
Net Income	28,000	–	28,000
Revaluation of Intangible Asset	–	15,904	15,904
Total Stockholders' Equity	436,349	15,904	452,253
Total Liabilities & Equity	486,506	15,904	502,410

At this point, we can get the shareholder's equity value for the adjusted balance sheet.

This intangible adjustment of \$15,904 includes important software and intellectual property developed by the company for its AI security offerings.

	Before Valuation (\$)	After Valuation (\$)
Total Assets	486,506	502,410
Total Liabilities	50,157	50,157
Revaluation of Intangible Asset	–	15,904
Total Stockholders' Equity (Total Assets – Total Liabilities)	436,349	452,253

Thus, from a balance sheet perspective, the total value of Tech Corp, according to the asset-based approach, is worth \$452,253 after adjustments.



Waterfall Analysis And Black–Scholes Model

Before performing the Waterfall analysis and Black–Scholes Model, the company’s Cap Table and ownership percentage are shown below:

Equity	Shares	% Fully Diluted
Common	400,000	100.00%
Total Fully Diluted Shares	400,000	100.00%

- Apply the Black–Scholes Model to determine the claims on the equity value and the resulting “Breakpoints” or transition points. Each breakpoint represents a separate call option on the equity value of the company, and a relative allocation of the overall equity is derived for each of these call options.

Breakpoint	Transition Value	Equity Class receiving Value	Description of Event
1	\$ –	SAFE Notes	Liquidation Preference: SAFE Notes
2	\$400,000	Common Stock	Participation: Common Stock

- Each “Tranche” identified represents a separate call option with a claim on the company’s equity value.
- SAFE Notes issued by the company are not added to the fully diluted share count since they haven’t transformed into shares yet. For this reason, they are not involved in equity share or impact on 409A valuation.

Black–Scholes Inputs

- Equity Value (S): \$452,253
- Strike Price (K): \$400,000
- Volatility (σ): 50%
- Time to Liquidity (t): 1 year
- Risk-Free Rate (r): 4%

Black–Scholes Calculations

$$C = SN(d1) - Ke^{-rt} N(d2)$$

Where;

$$d1 = (\ln(S/K) + (r + \sigma^2/2)t) / \sigma\sqrt{t}$$

And

$$d2 = d1 - \sigma\sqrt{t}$$

- d1: 0.576
- d2: 0.076
- Option Value: \$120,779.558

Fair Market Value (FMV) Per Share

- Common Shares: 400,000
- FMV per Share: \$0.302 (120,779.558/400,000)

From this example, the company would need to set the FMV of the common stock at \$0.302 per share to be used for issuing and exercising stock options.