



# The SpaceX Valuation: The “Bad *Elden Ring* Build” of IPOs

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Much like a Tesla, Elon Musk’s *Elden Ring* build quality is shit.

 **Elon Musk**   @elonmusk · May 24, 2022

Replying to @elonmusk and @DadMurdos

Equipped load will be lower if fast roll is needed



2:02 AM · May 25, 2022

## How to Lose Billions Without Any Coherent Strategy – But Still Go Public for \$2 Trillion

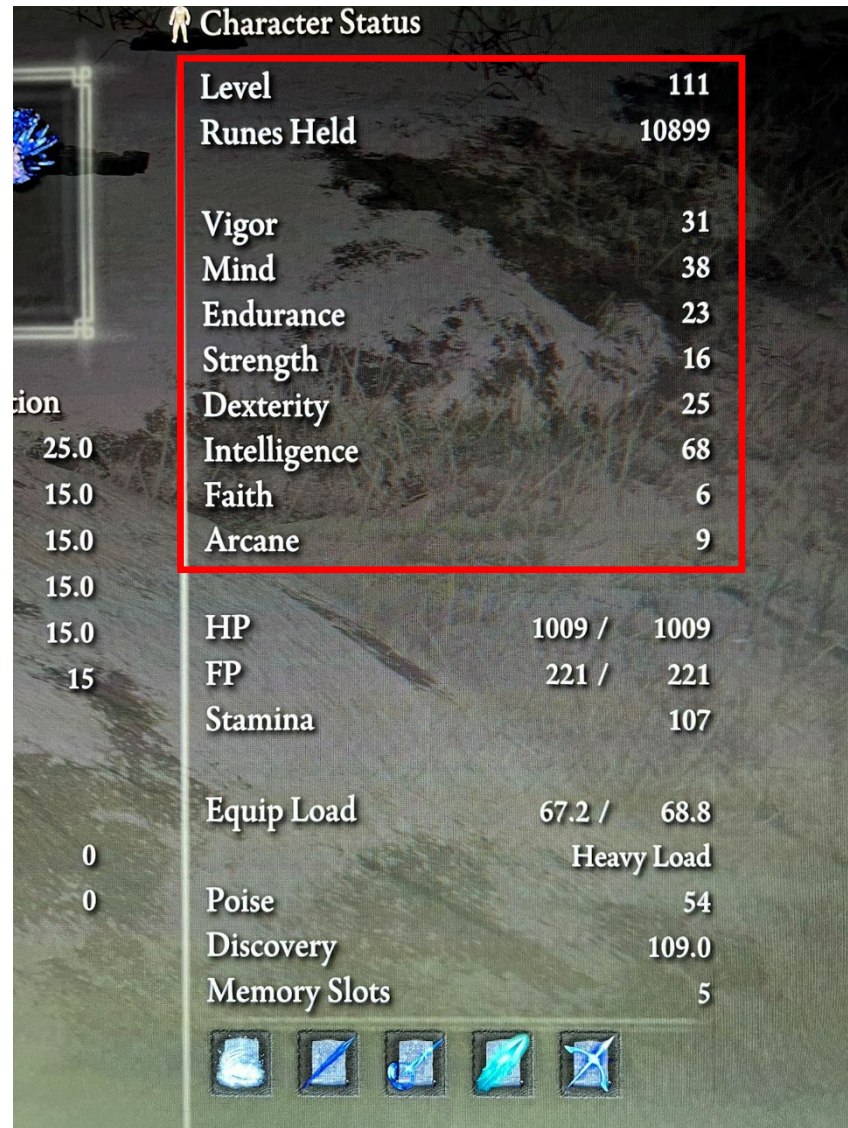
# Where SpaceX and Video Games Meet



He's wearing 2 *shields* and 2 *swords*, which is pointless since he can only use 1 at once; the other just slows him down, and magic users shouldn't be using these weapons anyway.

And he's a magic user but wears *heavy(ish) armor* that restricts his mobility. The idea of "switching armor" for better mobility is nonsensical in this type of action game.

# Where SpaceX and Video Games Meet



Character Status	
Level	111
Runes Held	10899
Vigor	31
Mind	38
Endurance	23
Strength	16
Dexterity	25
Intelligence	68
Faith	6
Arcane	9
HP	1009 / 1009
FP	221 / 221
Stamina	107
Equip Load	67.2 / 68.8
	Heavy Load
Poise	54
Discovery	109.0
Memory Slots	5

His Vigor, which determines Health Points in this game, is also way too low for a Level 111 character, meaning he'll die easily despite the heavy-ish armor.

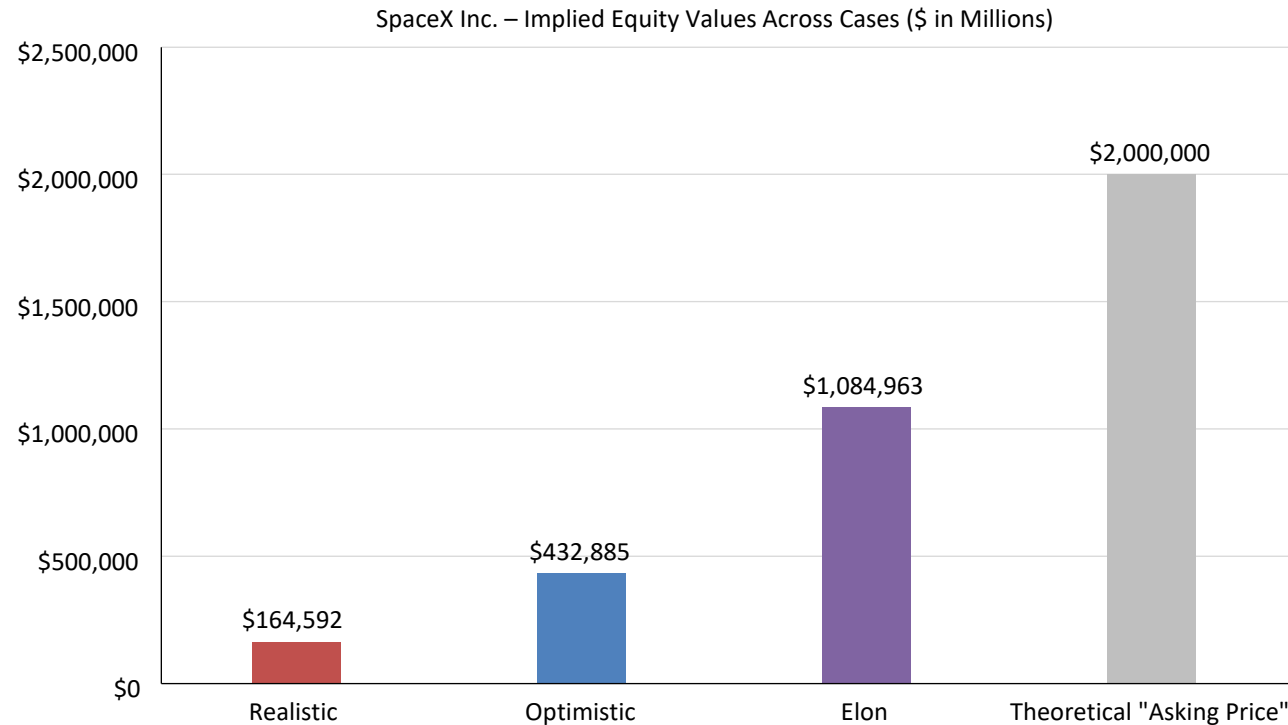
# Where SpaceX and Video Games Meet

Elon's character build in *Elden Ring* is very similar to SpaceX: **It doesn't know what it wants to be**, and it's not optimized for any specific outcome or playstyle.

It's a company doing a somewhat random mix of things and **losing money** with most of them.

# Where SpaceX and Video Games Meet

The **\$2 trillion asking price** makes SpaceX the most overvalued company to *ever* go public – worse than WeWork or Groupon.



# Where SpaceX and Video Games Meet

Most **online commentary** has focused on SpaceX's historical results and massive losses...

But valuation is ultimately based on **future cash flows**, so I wanted to focus on **data-driven forecasts**, based on real public companies across industries.

# Where SpaceX and Video Games Meet

Since the S-1 was issued, I've spent around **50 hours** reviewing it, analyzing ~100 companies in related industries, and building a detailed valuation model.

The **TL;DR** is that even if you assume massive outperformance for 20+ years, the math still doesn't math.

# Where SpaceX and Video Games Meet

Having said all that, I still do **not** recommend shorting the stock due to the recent “rule changes” around its inclusion in indices...

...and the fact that we’re in **the dumbest timeline imaginable**, meaning it will probably hit \$5 trillion.

# Where SpaceX and Video Games Meet

You can get the full Excel file, data, and my written summary for free via the link below (**pinned in the comments**):

<https://mergersandinquisitions.com/spacex-valuation/>

# SpaceX Valuation: Lesson Plan

- **Part 1: How Do You Value SpaceX?** **3:24**
- **Part 2: Starlink Forecasts and Valuation** **6:07**
- **Part 3: AI Forecasts and Valuation** **10:58**
- **Part 4: Space Forecasts and Valuation** **15:58**
- **Part 5: What About Orbital Data Centers or Lunar Tourism?!!!!** **20:53**
- **Part 6: Final Thoughts and Why I'm Staying Away** **22:35**

# Part 1: How Do You Value SpaceX?

- **Reality:** Operates 3 very different divisions with extremely different growth, margin, and CapEx profiles



- **Best Approach:** Long-term **Sum-of-the-Parts (SOTP)** DCF



- **Multiples:** Tend to understate potential values because of the high growth potential and wide range of possible outcomes

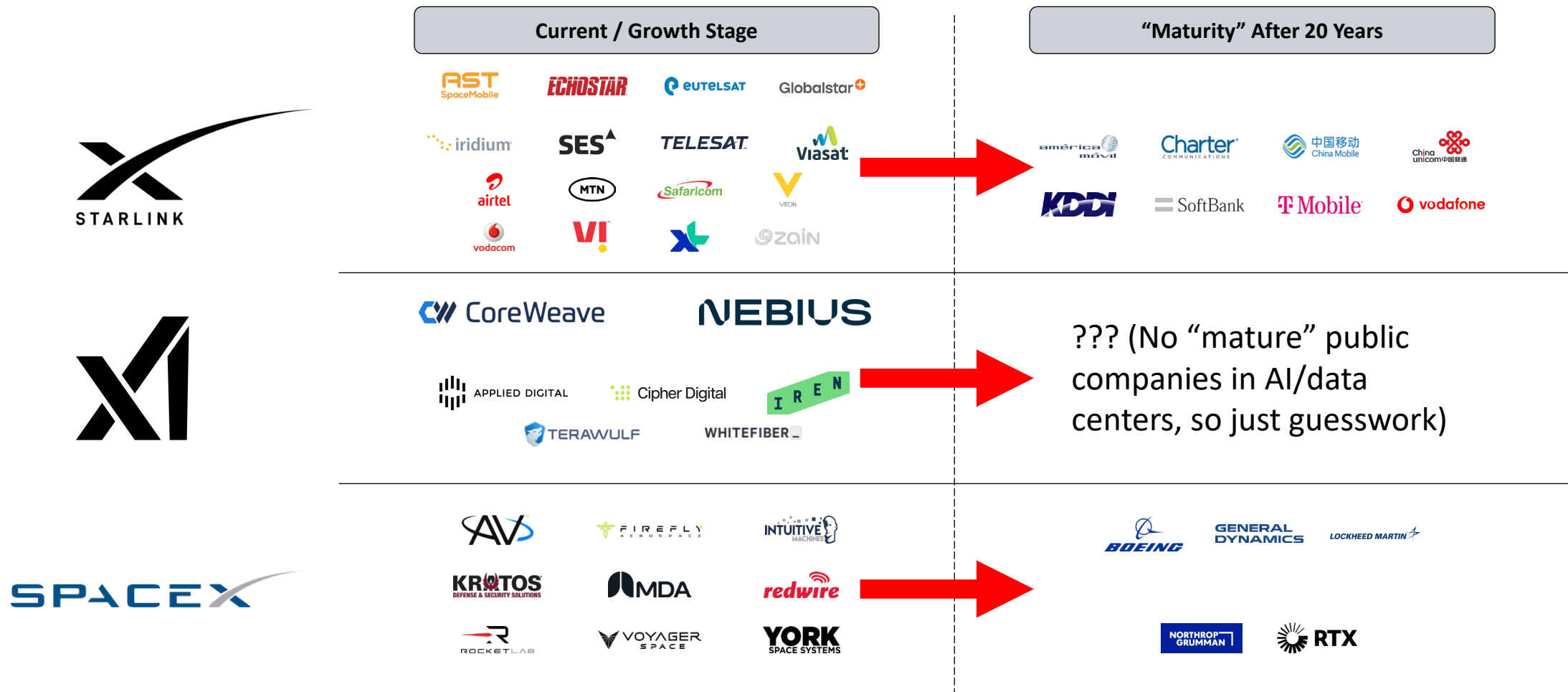


- **Approach:** Assume an “initial state” for each division and make it progress to a “mature state” over ~20 years



# Part 1: How Do You Value SpaceX?

- **Progression Examples:** For each division..



# Part 2: Starlink Forecasts and Valuation

- **Most Important:** Accounts for most of SpaceX's Revenue, Operating Income, and UFCF – it's actually profitable!
- **Closest Analogue:** High-growth, emerging markets-focused telecom company, like Bharti Airtel (India) or MTN (Africa)
- **Trends:** Very high subscriber growth and market penetration, but falling ARPU as the company targets more EM customers
- **Disagreements:** S-1 cites a "\$660 billion addressable market based on 1.8 billion households," but this is far too high – rural households w/o internet are in the ~hundreds of millions



# Part 2: Starlink Forecasts and Valuation

	Realistic, FY 45	Optimistic, FY 45	Elon, FY 45	Growth Median	Mature Median
Individual Subscribers	▪ 113 million	▪ 170 million	▪ 226 million	▪ 203 million	▪ 220 million
Monthly ARPU	▪ \$24.73	▪ \$24.73	▪ \$24.73	▪ \$3.16	▪ \$18.57
Ship/Air Customers	▪ 98K	▪ 147K	▪ 196K	▪ N/A	▪ N/A
Monthly Unit Rate	▪ \$14,145	▪ \$14,145	▪ \$14,145	▪ N/A	▪ N/A
Revenue	▪ \$51 billion	▪ \$76 billion	▪ \$102 billion	▪ \$6.1 billion	▪ \$55 billion
EBITDA (Margin)	▪ \$38 billion (74%)	▪ \$57 billion (74%)	▪ \$76 billion (74%)	▪ \$2.8 billion (46%)	▪ \$17 billion (31%)
CapEx % Revenue	▪ 16%	▪ 16%	▪ 16%	▪ 18%	▪ 12%
Discount Rate	▪ 9.8% → 7.5%	▪ 9.8% → 7.5%	▪ 9.8% → 7.5%	▪ 9.8%	▪ 7.5%
Implied TEV	▪ \$125 – \$182 billion	▪ \$188 – \$288 billion	▪ \$261 – \$428 billion	▪ N/A	▪ N/A

# Part 3: AI Forecasts and Valuation

- **3 Separate Business Lines:** Twitter / X (ad revenue), “AI Solutions & Infrastructure” (selling AI subscriptions and tokens), and Renting Unused Compute Capacity (Anthropic deal)
- **Assumptions:** Split the company’s ~1 GW data center capacity into the part it’s using for its own training/inference and the part it’s renting to Anthropic (and others?) and assume \$ / MW rates
- **AI Data Centers:** ~31 GW globally as of the end of FY 25; we assume they grow to 312 GW by FY 45, with 4 – 6% share for xAI
- **Others:** Very moderate growth in \$ / MW and X users & ad rev.



# Part 3: AI Forecasts and Valuation

	Realistic, FY 45	Optimistic, FY 45	Elon, FY 45	GPU-First Neoclods	Infra-First Hosting
Active Capacity	▪ 9.8 GW	▪ 12.2 GW	▪ 14.7 GW	▪ 510 MW	▪ 80 MW
AI Revenue	▪ \$8.58 / MW	▪ \$8.58 / MW	▪ \$8.58 / MW	▪ N/A	▪ N/A
Unused Capacity	▪ 2.5 GW	▪ 3.1 GW	▪ 3.7 GW	▪ N/A	▪ N/A
Licensing Rates	▪ \$33.94 / MW	▪ \$33.94 / MW	▪ \$33.94 / MW	▪ \$7.55 / MW	▪ \$3.99 / MW
Revenue	▪ \$180 billion	▪ \$222 billion	▪ \$263 billion	▪ \$3.6 billion	▪ \$210 million
EBITDA (Margin)	▪ \$125 billion (69%)	▪ \$154 billion (69%)	▪ \$182 billion (69%)	▪ \$1.8 billion (50%)	▪ \$69 million (33%)
CapEx % Revenue	▪ 14%	▪ 14%	▪ 14%	▪ 475%	▪ 468%
Discount Rate	▪ 14.6% → 9.6%	▪ 14.6% → 9.6%	▪ 14.6% → 9.6%	▪ 14.6%	▪ 25.9%
Implied TEV	▪ \$18 – \$181 billion	▪ \$42 – \$259 billion	▪ \$69 – \$350 billion	▪ N/A	▪ N/A

# Part 4: Space Forecasts and Valuation

- **Ironic:** SpaceX is best known for rockets, but this is the **least important** division, valuation-wise
- **Why:** Much lower growth than Starlink or xAI, and cash flows and profits are marginal
- **Confusion:** S-1 does not break out “external launches” for customers outside the company, so we did this manually
- **Assumptions:** Rapid expansion in Orbital Launches (0.1 → 1.2 per day); significant margin increases and CapEx reductions

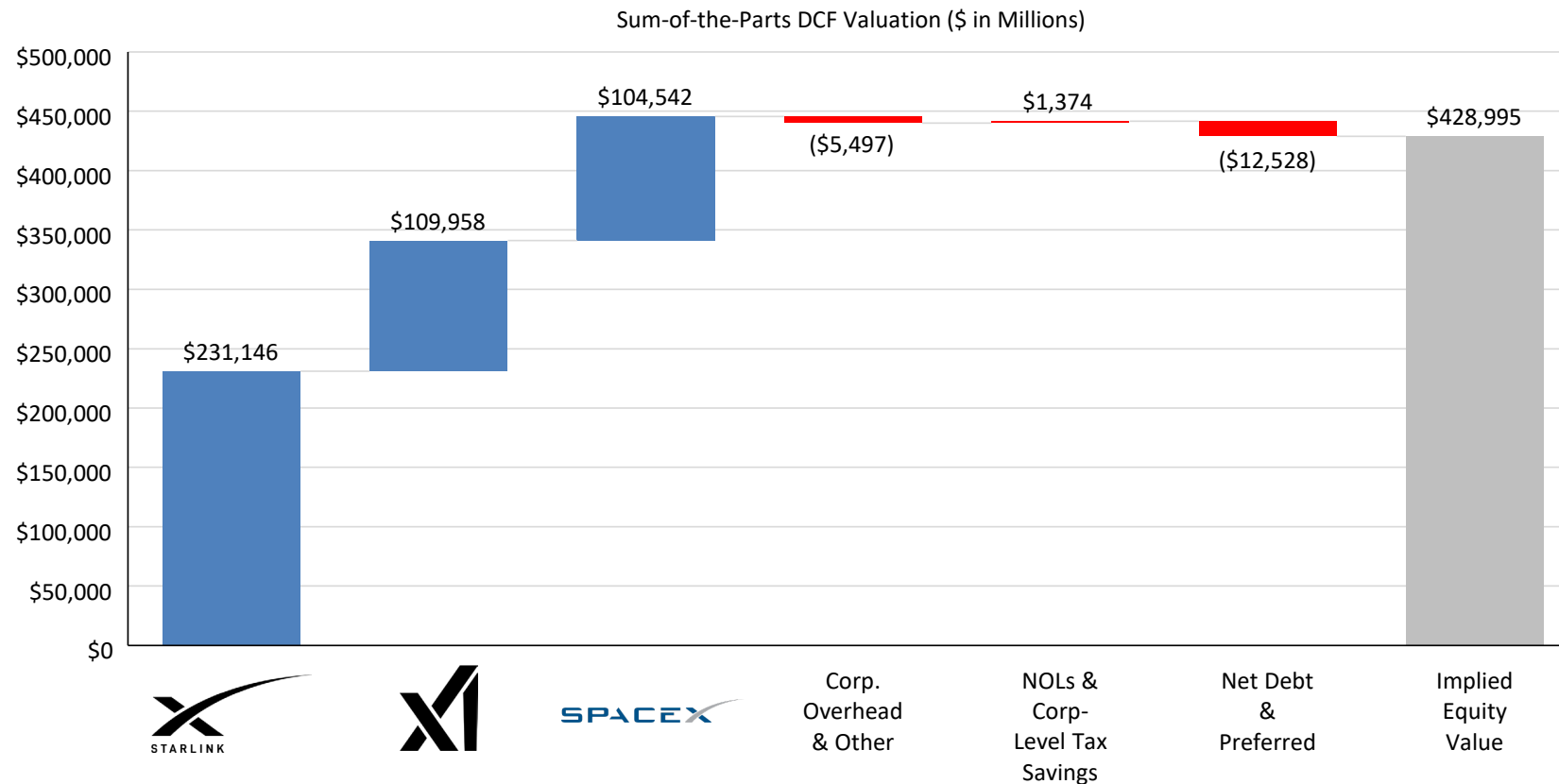


# Part 4: Space Forecasts and Valuation

	Realistic, FY 45	Optimistic, FY 45	Elon, FY 45	Growth Median	Mature Median
External Orbital Launches	▪ 280	▪ 436	▪ 668	▪ N/A	▪ N/A
Revenue per Launch	▪ \$341M per launch	▪ \$341M per launch	▪ \$341M per launch	▪ N/A	▪ N/A
Backlog / LTM Rev.	▪ N/A (7.2x current)	▪ N/A (7.2x current)	▪ N/A (7.2x current)	▪ 1.6x current	▪ 2.5x current
Revenue	▪ \$96 billion	▪ \$149 billion	▪ \$228 billion	▪ \$396 million	▪ \$75 billion
EBITDA (Margin)	▪ \$41 billion (43%)	▪ \$63 billion (43%)	▪ \$97 billion (43%)	▪ \$14 million (4%)	▪ \$11 billion (14%)
CapEx % Revenue	▪ 5%	▪ 5%	▪ 5%	▪ 12%	▪ 3%
Discount Rate	▪ 14.0% → 8.0%	▪ 14.0% → 8.0%	▪ 14.0% → 8.0%	▪ 14.0%	▪ 8.1%
Implied TEV	▪ \$38 – \$114 billion	▪ \$63 – \$192 billion	▪ \$101 – \$323 billion	▪ N/A	▪ N/A

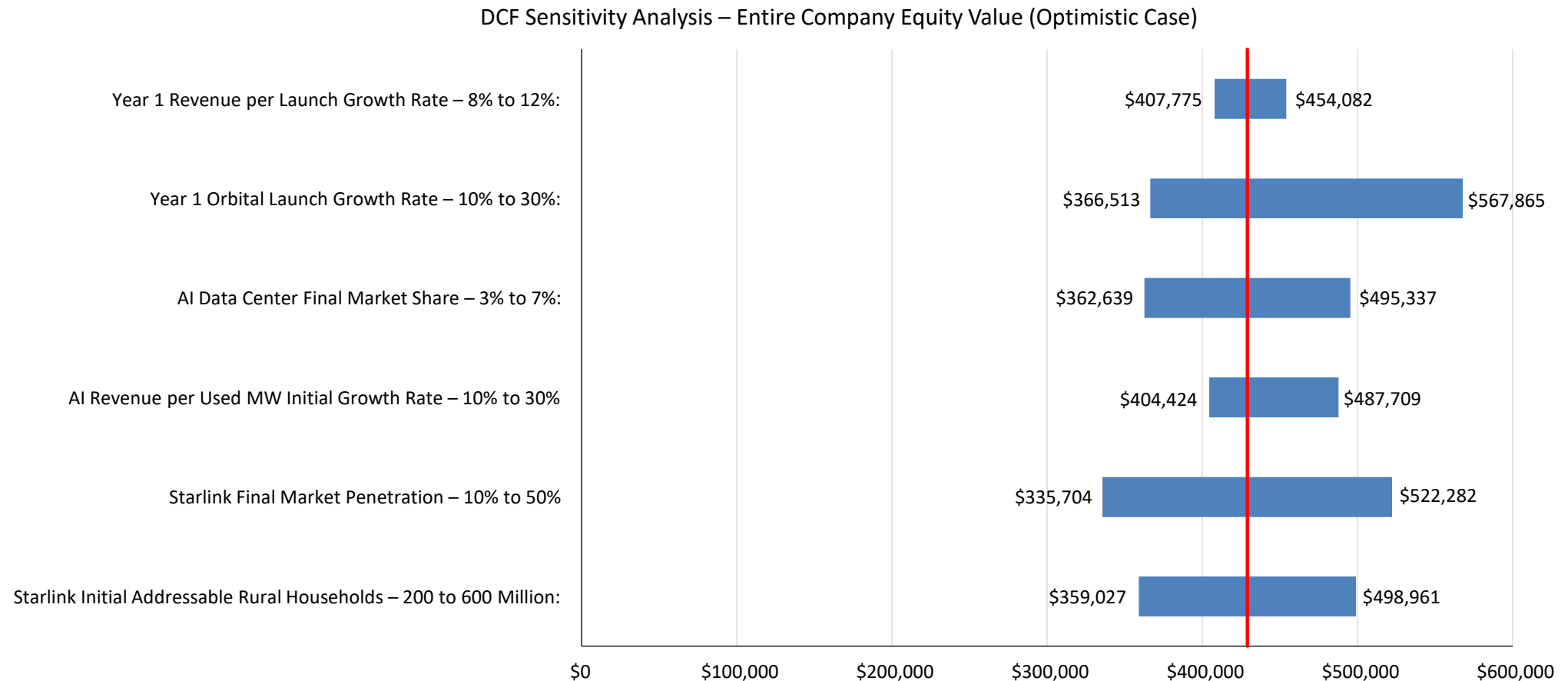
# Valuation Summary

- Even in the “Optimistic Case,” it’s hard to see how the numbers add up to anything close to \$2 trillion:



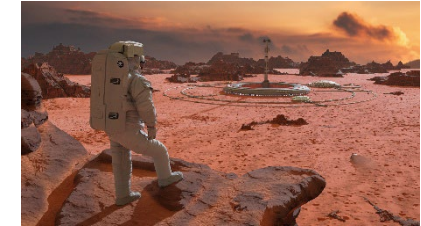
# Valuation Summary

- Even if you vary some of the assumptions quite significantly, the *overall valuation* barely changes:



# Part 5: What About Orbital Data Centers?!!!

- **Common Objections:** “But what about orbital data centers? Lunar tourism? Trips to Mars? FTL travel? Asteroid mining!”



## *Future Markets*

- Point-to-point terrestrial travel
- Space tourism
- In-orbit manufacturing
- Passenger and cargo transport to the Moon and Mars
- Energy production on the Moon and Mars
- Manufacturing capabilities on the Moon and Mars
- Asteroid mining

- **Issues:** All these ideas are so speculative, so expensive, and so far away that they are impossible to factor into a valuation *today*

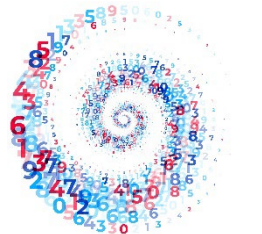


- **More Relevant:** NASDAQ “rule changes” and the rush to dump this stock onto retail ~~bag~~ holders investors



# Part 6: Final Thoughts

- **This Video:** Not meant to be a personal attack on Elon Musk, even though his *Elden Ring* build is still hilariously bad
- **Truth:** SpaceX is inspiring, and Starlink is exceptional – potentially one of the biggest telecoms in only a few years
- **But:** The question is *price vs. value*, and the math doesn't math
- **Question:** How do you want to “play” your investments? Random and disorganized, or optimized for specific outcomes?



# Recap and Summary

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