

Before Giants Rise, Rockets Explode

By Don Sutherland

As is often the case following the conclusion of each semester, I leave my students a final note or announcement. Below is the note following the end of the Spring 2026 term:

Now that the Spring 2026 semester has officially ended, I want to offer one final note.

First, I appreciated the opportunity to have you in my class. I have strong confidence that you will succeed in your studies and in whatever comes next.

Looking ahead, frontier industries such as artificial intelligence, robotics and physical AI, quantum computing, the space economy will reshape work, management, and the broader labor market. But emerging industries do not evolve in a straight line. They advance through breakthroughs and setbacks, progress and failure.

Last night's fiery explosion of Blue Origin's New Glenn rocket is one example. Investing in, serving, or working in emerging industries is not for the risk-averse. Opportunity is often proportional to risk.

The risk-averse usually arrive later, after an industry has been de-risked, standardized, regulated, and matured. By then, most of the asymmetric gains have already been captured by others. The risk-averse do not make new industries possible.

The private launch industry is still young. Its first successful privately funded launch took place in 1982. Think of where commercial aviation stood roughly forty years after the airplane's invention. In 1948, air travel was still dangerous by modern standards, with about 5 fatalities per 100 million passenger-miles. Twenty years later, that rate had fallen by about 90%. Meanwhile, global airline passenger revenue rose from roughly \$0.9 billion in 1948 to about \$11.5 billion in 1968. Last year, it exceeded \$700 billion.

That is what emerging industries look like in real time: failures, explosions, investigations, redesigns, and destroyed capital. Many companies fail. Others survive, scale, and eventually become giants.

Amazon is one example. There was a time when it was fragile and dismissed as "just another middleman." In his 2000 letter to shareholders, Jeff Bezos wrote:

Ouch. It's been a brutal year for many in the capital markets and certainly for Amazon.com shareholders. As of this writing, our shares are down more than 80% from when I wrote you last year.

But Bezos also identified a key source of differentiation: transforming the customer experience. He continued:

Industry growth and new customer adoption will be driven over the coming years by relentless improvements in the customer experience of online shopping... In the physical world, retailers will continue to use technology to reduce costs, but not to transform the customer experience.

Today, Amazon is a \$2.9 trillion company.

The space economy and other emerging industries will be no different. Critics will point to events such as yesterday's rocket explosion as proof that an industry is too risky or that its vision cannot be achieved. They will be wrong. The future is not built by staring backward at failure. It is built by learning from experience and seeing what comes after the smoke clears.

I wish you great success. I hope you pursue your dreams and passions wherever they lead. Never let cynics close your doors of opportunity by telling you that your dreams are foolish or that what you seek cannot be done.