Dylan Vo

Dr. Huffman, Dr. Omojokun

CS 8803

2 June 2025

Acquisitions Project Proposal

**Company Background: Acquirer**

The company I have chosen for this assignment is Blue Origin, a private aerospace technology company focused on reducing the cost of access to space, enabling a future where "millions of people live and work in space." Founded in 2000, the company is working towards this goal by developing the infrastructure needed to sustain a long-term human presence in space. The company is headquartered in Kent, Washington, but has other manufacturing and launch facilities in Texas, Florida, and Alabama. Blue Origin's current markets are in aerospace engineering, advanced manufacturing, and commercial spaceflight. Being owned and funded entirely by billionaire Jeff Bezos, the company does not currently make a profit. However, its business model relies on government contracts like NASA's human landing system and commercial launch services to eventually drive revenue.

Since Blue Origin operates in a wide variety of markets in the aerospace industry they have many competitors. In the rocket payload market, New Glenn is their fully reusable orbital launch system capable of carrying large payloads with significantly larger volumes compared to its competitors. There are many other competitors with rockets capable of carrying payloads, but SpaceX would be the primary competitor as they are the main provider of reusable rockets. In the commercial spaceflight market, New Shepard is the company’s fully reusable suborbital rocket designed for microgravity research and space tourism. The only competitor in this market is Virgin Galactic. Finally, in the in-space systems market, Blue Origin has technology from their space station, Orbital Reef. They also have a variety of in-space vehicles and robots. Lastly, they have a lunar lander that will be used in NASA’s Artemis program. With the in-space systems market being very large, there are many competitors, namely SpaceX, Boeing, Lockheed Martin, and many more. They are currently falling far behind their major competitor, SpaceX, in the launch services market. As Blue Origin transitions from a research and development company to an operating commercial spaceflight company, they will need all the resources they can get.

**Company Background: Acquisition Target**

For the acquisition target, I have chosen Relativity Space. Relativity Space is a private launch services provider and aerospace manufacturer. It was founded in 2015 by former Blue Origin and SpaceX engineers and is currently based in Long Beach, California. The company is unique in its new approach to rocket manufacturing focused on automation, 3D printing, and vertical integration. In terms of goals, the company aims to hasten humanity’s multi-planetary presence by reworking the aerospace manufacturing and supply chain. Relativity Space produces two orbital launch vehicles that are composed of 85-95% 3D printed parts - Terran 1 and Terran R. Terran 1 was launched in 2023 but failed to reach orbit. They are now using what they learned from that launch to design and build Terran R, a fully reusable, heavy lift launch vehicle designed to compete with SpaceX’s Falcon 9.

Like other launch providers such as SpaceX and Blue Origin, Relativity’s business model is centered around providing launch services to commercial satellite providers, government agencies, and defense companies. They have already received over $1.6 billion in launch contracts. In terms of challenges, Relativity is a pre-revenue company with a small history of launches. The company must prove that they can produce reliable and cost-effective launch systems in a highly competitive market where other companies like SpaceX, Rocket Lab, and ULA already provide proven systems. Because Relativity is the only company in the aerospace industry with a redefined manufacturing process focused on 3D printing, they face many challenges and pressures.

**Acquisition Rationale**

As mentioned previously, Relativity’s primary focus is to speed up humanity’s multiplanetary future by reworking aerospace manufacturing using 3D printing. Blue Origin can utilize Relativity’s processes and 3D printing expertise to increase their manufacturing rate. It would also provide an advantage in that they will have ownership of Terran R as a fully reusable medium launch vehicle to compete with SpaceX’s Falcon 9. Blue Origin’s New Glenn rocket is a larger vehicle, more expensive vehicle designed to compete with SpaceX’s heavy-lift Falcon Heavy launch vehicle. For Blue Origin, owning both Terran R and New Glenn would broaden their launch portfolio, providing them access to different tiers of launch services that they can provide. The acquisition would also bring in plenty of engineering talent that could be very useful at Blue Origin. In terms of why Blue Origin should choose to acquire Relativity, that would be because of its investment in manufacturing technology. While there are other promising launch companies like Rocket Lab and Firefly Aerospace, these companies use manufacturing methods like what Blue Origin already uses. Relativity would provide Blue Origin with new, unique processes currently only used at Relativity.

**Acquisition Feasibility**

Being wholly owned by billionaire Jeff Bezos, Blue Origin would have no financial problems acquiring Relativity Space. Bezos has committed to funding Blue Origin by selling approximately $1 billion in Amazon stock annually. To date, he has single-handedly provided $10 billion in funding to the company. Meanwhile, Relativity’s most recent valuation has put the company’s value at around $4.2 billion. Assuming a premium of around 25% for the acquisition, that would mean Blue Origin would need $5.25 billion to acquire Relativity. While this is not an insignificant amount, Bezos is fully capable of committing this amount of money using his net worth of $219 billion.

On the regulatory side, there will likely be no issues with the acquisition. Neither company holds dominant market share in orbital launch services, as that title would be held by SpaceX or ULA. The acquisition would also not remove any key players in the market. In terms of logistics, it would make perfect sense for the Washington-based Blue Origin to acquire the California-based Relativity Space. Blue Origin has sites in all major regions of the United States and would have no issue transporting people and goods across the country. Both also operate out of Cape Canaveral, Florida, so they share a common launch site.

Finally, regarding due diligence, it seems that essentially everything mentioned in the lecture will need to be reviewed by Blue Origin to conduct proper due diligence. Most importantly, human capital, manufacturing facilities, and intellectual property will need to be investigated. This means what specific engineering, manufacturing, and leadership talent Relativity has and what Blue Origin must do to incentivize those members to stay. Next, what manufacturing facilities does Relativity own and what EHS standards they are following. Lastly, what patents and intellectual property does Relativity own and how will Blue Origin ensure that they will own those properties after the acquisition. To ensure this due diligence is performed properly, Blue Origin would need to receive assistance from legal counsel, accounting firms, and other technical consultants.