

Cargo Bay: Competitive Analysis

Prepared by: Gentry Atkinson

State of the Industry:

Small-parcel sales for orbital launch tonnage is not a well established industry at this time. There are several businesses which are competing for market space in the launch of "small" satellites but small usually still means several tons and typically one purchaser will buy the entire launch vehicle rather than several purchasers sharing the body of an ascent vehicle. There has been some motion towards launching several or many satellites in the body of the same rocket but the available packages are still quite large, starting at 440 lbs for SpaceX's rideshare program.

Online brokerages are much better established. EBay is a standard across several industries and is in a position to set industry-wide standards. Any online auction site will have to meet the vehement competitive potential posed by EBay. Despite this, several other players have been able to enter the field by establishing a niche that is not served by EBay. Offer-Up has established itself as an "in person" online auction site. Alibaba has secured an enormous market share by linking buyers directly to foreign manufacturers without a middle man (other than Alibaba). Finally, Amazon has encroached somewhat by allowing sellers to interact directly with customers to provide products that otherwise would not be offered on Amazon.

Potential Competitors

There are two potential sources of competition that CargoBay will have to face. The first is that existing firms that offer orbital launch services may begin to offer smaller parcels of launch space. By allowing a customer that requires 125lbs of space to buy exactly 125lbs of space, launch providers could correct a market inefficiency that is currently keeping many purchasers (such as research and hobby groups) from entering the market. The danger is that the launch companies themselves would end up having to eat the cost of that inefficiency if they were forced to launch rockets with unsold space (a situation which plagues many airlines). The following firms could potentially move into CargoBays projected market space:

| | SpaceX | Rocket Lab | Northrop Grauman | Boeing |
|-------------------|--|--|---|--|
| Market Position | Currently the leading non-governmental manufacturer of launch vehicles | New Zealand based manufacturer of low-cost, small sat rockets. | Producing an uncrewed space vehicle for NASA resupply missions. | Producing a crewed space vehicle for NASA resupply missions. |
| Growth | Rapid. Buoyed by DeepSpace satellite network. | Rapid but too new to have solid figures. | Steady | Troubled |
| Estimated Revenue | \$2 billion | \$10 million | \$30 billion (mostly not from space industry) | \$93 billion (mostly not from space industry) |

The second potential source of competition will be from online brokerages moving towards listing unused orbital launch space as a commodity on their own sites. EBay could make this shift most easily but realistically several of them could make the shift with minimal development costs. The following online auctions sites could potentially offer launch space for sale:

| | EBay | Alibaba | Amazon |
|-------------------|--|--|---|
| Market Position | Offers auctions in <i>many</i> different product areas. Largely avoids services. | Could have advantageous access to Chinese and Indian rocket manufacturers. | Closely entangled with the rocket manufacturer Blue Origin. |
| Growth | Steady | Rapid | Rapid |
| Estimated Revenue | \$10 billion | \$115 billion | \$232 billion |

Competitive Strategy:

To stand any real chance of survival CargoBay will have to establish itself early on as a repository for expertise in space flight. The market analysis for CargoBay predicted substantial lag in sales driven by research budgets. While this lag might be an obstacle for CargoBay, it will also serve as a shield keeping others from moving into CargoBay's market space after it is established.