IAF BUSINESS INNOVATION SYMPOSIUM (E6) Entrepreneurship and Innovation: The Practitioners' Perspectives (1)

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SATSEARCH.CO: THE DATA LAYER FOR THE SPACE INDUSTRY

Abstract

How many space startups were established in the last five years in Europe compared to the US? Which batteries for smallsats, with flight heritage and under 2 kg, are available on the market? What is the standby power of Honeywell's HR-0610 reaction wheel?

Stakeholders across the value chain, including systems engineers, procurement engineers, business developers, and market analysts grapple with a myriad of questions like these on a daily basis. Typically, to answer these questions they have to resort to manual searches. The effort required to even address rudimentary questions can necessitate an inordinate level of manual effort that includes scouring the internet, wading through long PDF datasheets, emailing and calling suppliers, and relying on a network of "space friends".

Being able to answer such questions is vital to ongoing efforts to develop sustainable technologies, missions and enterprises. Rapid growth of the space industry has led to ever-growing fragmentation of the global supply chain. Over the last decade, NewSpace companies offering cutting-edge products services have popped up all around the world. As new countries like UAE and Australia enter the fray, the supply chain fragments further; hence the search problem is only worsening.

The issue of broken search within the space industry is a core challenge to address. Fixing industrywide search is a vital part of ensuring continued growth over the coming decade. Much like how launch systems and ground systems are considered vital infrastructure layers that are necessary to propel the sector forward, we have identified that a unified industry "data layer" is essential for growth and at present largely missing. At satsearch, we're building this data layer for space by consolidating, harmonizing, and structuring the global space supply chain. We are indexing all of the products and services offered by suppliers around the world and serving them through our platform. By building the "Google for space", we are helping to increase engineering efficiency, reduce lifecycle costs, and minimize schedule slip across the industry.

In this paper, we chronicle our journey as a space startup thus far, touching upon the core challenges and obstacles we have faced since inception. We provide insights into our core value proposition, technology, and concrete use cases that will change the way the industry utilizes data across the value chain. We also summarize our business case and the challenges associated with moving the space industry towards digitalization.