The UAE is poised to become the Leader in Al-enabled Space-based Solutions

The local space ecosystem is growing rapidly. Fueled by its vision, its values, its talent pool and its innovation spirit, the United Arab Emirates is uniquely positioned to solve global space challenges and deploy next-generation solutions.

The Challenge: from Satellites to Insights

The global space industry is seeing a growing number of manufacturers, operators, and application providers. While this has created a lot of excitement and spurred innovation, significant challenges remain. Translating data that comes from earth observation satellites to actionable insights for decision-makers is still a challenging process. Whether from the perspective of national security, civil missions, or commercial monitoring, the global market still faces a significant gap in providing true end-to-end solutions that can enable real-time decision making, saving lives and fueling economic growth.

The Opportunity: UAE Leadership

The nation has an exceptional opportunity to solve this problem. By combining and advancing the technology building blocks already present locally thanks to its vision, investments, and partnerships, the UAE can become a leader of end-to-end space-based solutions, enabled by artificial intelligence.

A few key factors can solidify this status:

- 1. **The Industrial Fabric:** The Abu Dhabi Space Debate proved something that the Emirati space community already knew: from satellite operators to ground stations, all the way to software applications, the ingredients are all there for a bold next step in the country's space journey. The local ecosystem is stronger than ever before.
- 2. **Culture of Innovation:** With world-class research institutions, universities, and commercial endeavors in cutting-edge technology, from artificial intelligence to computing and processing, there is no need to look far to find ideal partners to deploy applications at scale.
- 3. **Local Talent:** Emirati talent, as well as the global workforce that has been trained and cultivated by the country, provide the ideal bench of technical, creative, and commercial minds to make this a reality.
- 4. **Global Pathways and Connectivity:** Uniquely positioned between East and West, the UAE is the ideal origin for solutions that can be delivered globally, solving governmental, civil, and commercial problems across the world.

How Orbitworks can Enable This

Orbitworks is an Emirati space company based in Abu Dhabi, building on the experience of strategic partners with proven model to deploy satellite constellations rapidly, simply, and cost-effectively. This approach enables the deployment of AI applications from space, transforming the business model of the space industry. Orbitworks operates out of a 50,000-square-foot facility in Abu Dhabi, aiming to manufacture up to 50 satellites per year, becoming a key player in the UAE's space ecosystem.

Orbitworks can produce and deploy a next-generation constellation of 10-to-100 satellites delivering multisensor information and Al-derived insights from space beginning in as quickly as eighteen months. Orbitworks aims to do so entirely out of Abu Dhabi, leveraging local talent, expertise in offsets and partners across the local ecosystem.

