Reuse, Reevaluate, Redesign

Team: IUA Space

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Challenge: Commercializing Low Earth Orbit



A sustainable platform that enables the reconfiguration of existing satellites in Low Earth Orbit (LEO) to be used for new missions.













What is the Problem?

Today, there are tens of thousands of active and passive satellites in Low Earth Orbit (LEO).

Launching a new satellite for each new mission is both costly and harmful to the environment.

Many satellites are still operational but are not being used after completing their mission.

This results in both economic loss and space pollution, which is also known as space debris.









Here's the Solution:

No need for a new launch. Lease satellites that have completed their mission duration but still have operational life left, at a lower cost!

Benefits

Satellite owners add their satellites to the platform.
Researchers, students, or small teams can lease satellites for short-term missions.

Recycling

OrbitShare reconfigures satellites that have completed their missions but are still operational, enabling them to be used for new tasks.

Space Debris

Contribute to stopping space debris by fulfilling missions with existing satellites through OrbitShare, without sending additional satellites.



A system that benefits everyone. But how?

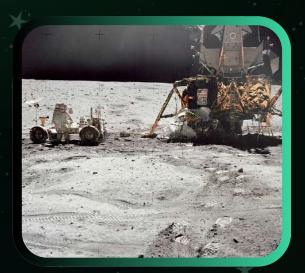
Satellite Owners: Earn income from their idle satellites.

Users: Perform missions at a low cost without launching new satellites.

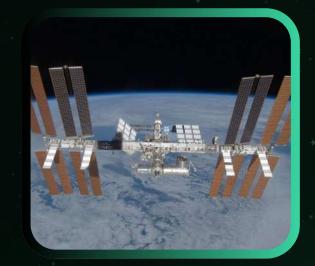
OrbitShare: Provides connectivity, configuration, and data transmission.

Partners: Universities, research institutions, ground stations

Business Model



01. Low-Cost Software Testing



O2. Earning Revenuefrom Passive Satellites



03. Stopping Space Debris









Technical Vision

01.

Today, many satellites operate based on software, and their mission parameters can be remotely changed.

Our system aims to use this infrastructure to reconfigure satellites.

02.

OrbitShare also utilizes NASA's open orbital and debris data. With this data, we can determine which satellites are still active and which ones are in safe zones.











Sustainability and Impact

OrbitShare creates impact in three areas:

- Economic: Reduces satellite launch costs and opens new revenue streams.
- Environmental: No need for new launches, slowing down space pollution.
- Educational: Universities and researchers can access space much more quickly.









What seems like an idea today is part of tomorrow's space economy.





Improvements & Conclusion

"We are the IUA Space team.
We are here to reclaim, rethink,
and make space more
sustainable."