

Management in Space Economy

Democratization of Outer Space for the development of National Industry

Produced by Spacely Ltda. © Authors: Pablo Dueñas Rivera pablo.duenas@spacely.cl Cristian Gallegos Gutiérrez cristian.gallegos@spacely.cl Colaboration: Spacely Team Santiago, Chile 2024

MANAGEMENT IN SPACE ECONOMY BUSINESS MODEL FOR THE DEVELOPMENT OF THE INDUSTRY

CONTENTS

- WHO WE ARE
- MISSION VISION
- STRATEGIC AXES
- STRATEGIC SERVICES
- UPSTREAM/DOWNSTREAM SOLUTIONS
- TARGET MARKET
- APPLICATIONS
- MANAGEMENT PROCESS
- BENEFITS

→ WHO WE ARE

Team and Collaborators

We are a team of professionals with more than 20 years of experience in the formulation of space projects related to the sciences of Remote Sensing, Satellite Earth Stations, Engineering, Assembly Processes, Integration and Testing (AIT) and I2D infrastructure.

We are preceded by being Specialists in Aerophotogrammetry, Electronics, Cartography, Engineering and Mechanics, in addition to having skills for Project Administration and Evaluation.

Additionally, we have been participants in the development of the "National Satellite System" Project and Space Centers of the Regional Government of Antofagasta and Magallanes and Chilean Antarctica..



We combine the management of spatial projects based on the agile methodology and good practices (Lean Project Management)

Strategic Guidelines

MISSION >>>>

Contribute to the development of the national industry through the administration of space projects, promoting investment in cutting-edge technology.

VISION -

Democratize the use of Outer Space to encourage the creation of a new economic sector and prepare the industry for the technological challenges in the operation and exploration of activities beyond the planet.





→ STRATEGIC AXES





Solutions to the industry through the use of Space as a business model

→ STRATEGIC SERVICES

Consulting in Space Economy



Space Project Management

> Analysis in exploration and exploitation of Space

Advice and audit on space issues

Communications satellite

Space technology

Science

Earth Observation

Specialization of **Industry Services**

Business model **Potentials**



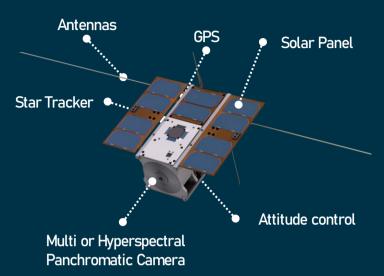
BUSINESS OPPORTUNITIES FROM SPACE

→ UPSTREAM SOLUTIONS

Project Management with Earth Observation satellites



SPACE SEGMENT (CUBESAT)



Includes Assembly, Integration, Testing, launch campaign and putting into orbit



LEO type Polar Orbit (Low Earth Orbit) Geosynchronous with the Sun

→ DOWNSTREAM SOLUTIONS

Operation and ground tracking service



GROUND SYSTEM



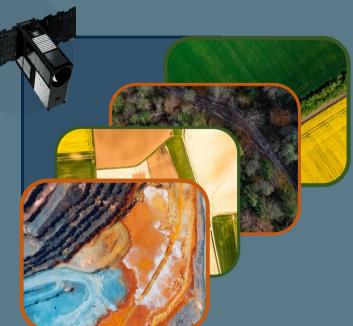
ANTENNA SYSTEM

- Multimission (variety of satellites)
- Multifunction (transmission/reception)
- · Local and remote operation
- UHF Band. S. X
- Monitoring and tracking system



PROCESSING SYSTEM

- High performance stations
- Processing software
- Geographic information system (GIS)



SATELLITE IMAGES

SPACELY+

→ TARGET MARKET

National Industry







MINING

AGRICULTURE

FORESTRY

- MAXIMIZE MINING OPERATIONS
 - REVOLUTIONIZE THE AGRICULTURE INDUSTRY
 - BOOST THE FORESTRY INDUSTRY
- * Potential Market: Fishing, Telecommunications, Security, Government, Construction, Logistics, Energy, Research or others, after analysis of industry requirements or needs.

→ APPLICATIONS





- Identify presence of minerals and materials (gold, copper and iron)
- Collect data on large and remote areas
- Map minerals and materials
- Monitor the environmental impact of mining operations





- Collect data on crops and soil conditions
- Monitor the extent and distribution of different types of vegetation
- Detect stress or illness
- Identify the nutrient content of the soil
- Detect the presence of weeds
- Identify the presence of specific types of vegetation
- Detect forest fires



^{*} Potential Market: Based on analyzes and technical-economic feasibility studies.



→ MANAGEMENT PROCESS



Stages to put your solutions into orbit



01

Information gathering in the National Industry (Client)

- **Needs detection**
- Requirements management
- Relationship with space sector
- Preliminary guidance



02

Information gathering in the space industry

- Supplier analysis
- Study of ad-hoc solutions
- Technology analysis

04 **Exploitation**

- Generation of services and solutions
- Monitoring in space operations
- Capacity expansion analysis
- Technological and Knowledge Transfer



03 **Project management**

- **Definition of Solution Alternatives**
- Materialization of the project
- Technology installation
- Operation (Start-up)



Solutions to the industry through the use of Space as a business model

→ BENEFITS



. In the use of Outer Space

IN THE DEVELOPMENT OF THE NATIONAL INDUSTRY

- Industry Growth
- Optimization in Operations
- Development of the Space area in the Economic Sector
- Autonomy in the use of Space technology
- Lower costs
- Generation of own solutions
- Consolidate Business Lines
- Foreign investment incentive
- New income in the Economy
- International cooperation and collaboration

COUNTRY OPPORTUNITY

- Democratize the use of Space
- Implement Space technology
- Encourage Innovation and Development
- Educate access and use of Space
- Link private and public industry



