

The Company

Making space  
a safer place.

ARCA  
DYNAMICS



## Our People

A growing team  
with **astronomic** results.

12 Ingegneri  
(11 FT+ 1PT)

1 Legal  
(PT-Consultant)

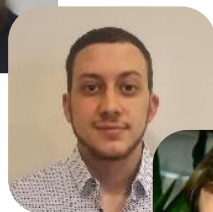
1 Marketing  
(PT-Consultant)



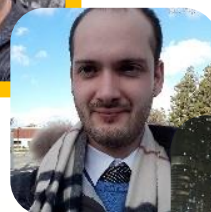
**Daniele Luchena**  
CEO | Co-founder



**Marco Moriani**  
COO | Co-founder



**Dario Spiller, PhD**  
CTO | Co-founder



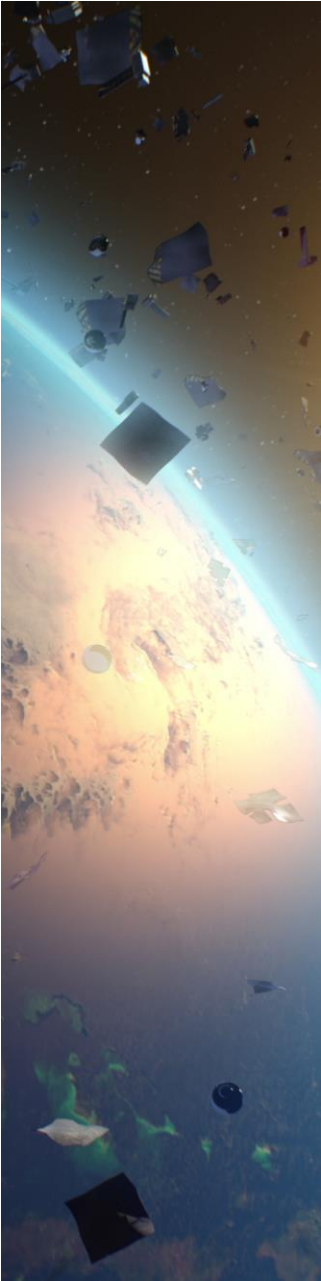
### Network



## The Scenario

# Space around Earth is filled with junk.

Only 0.04% of orbiting objects  
is estimated to be mapped and tracked.  
The unmapped & untracked objects are  
mainly debris **under 10cm.**



## The Problem

# Ground-based technology is not enough.



Telescopes and radars cannot spot small objects, the vast majority



Telescopes don't work during the day and with bad weather



Telescopes and radars are very expensive to build and operate



*Our Patented Solution*

# Welcome to the in-orbit surveillance system era.

Shifting observations from ground to space with an **in-orbit space surveillance system** allows to avoid atmosphere related issues while enhancing the opportunities of **mapping new objects**



Our *Patented* Solution

# A new warning service.



A space traffic monitoring constellation of 12 satellites maps orbiting objects of any size giving operators early warning for potential collisions in quasi real-time

Our *Patented* Solution

# Multi-sensors based technology.

Our *patented on-board software for object detection* will relentlessly work night and day thanks to



a *smart camera* that  
can see illuminated objects



a *passive Radio Frequency sensor*  
that can see in the dark



## Unique Selling Points

Continuous detection in the dark

World 1<sup>st</sup> and only patent (US-EU-IT) for on-board orbiting objects detection)

Tasked pointing capabilities for monitoring specific customer events

Persistent tracking thanks to the mix of optical sensor for detection and passive RF sensor for spectral signature labelling

Any-size detection including the range  $1\text{cm} < 10\text{ cm}$  (vast majority)

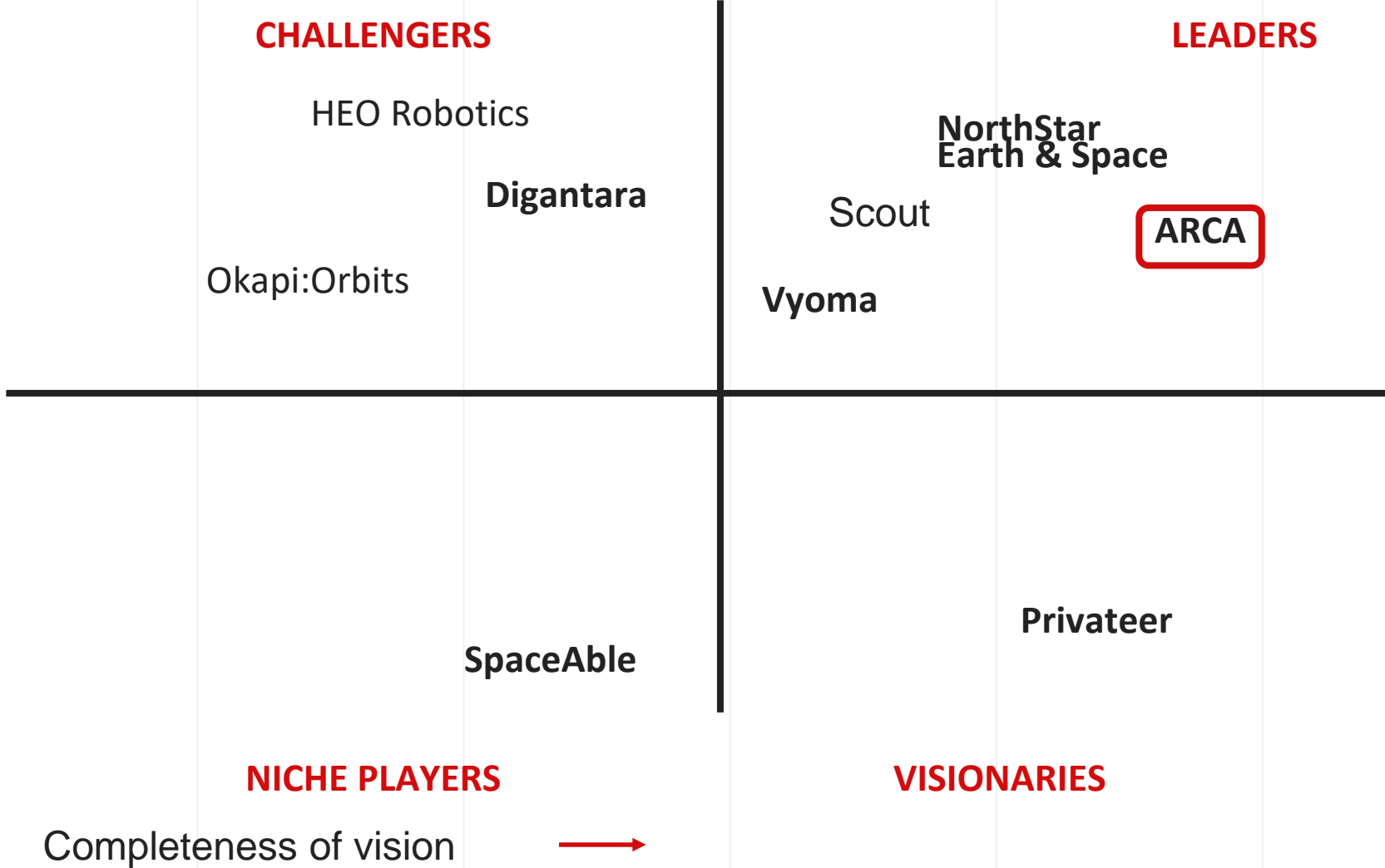
Flexible detection software capable of integration of upgraded sensors for customer needs





**Competitors**

Ability to execute ↑



Completeness of vision →



The Market

**SSA market is worth**  
**1.5 B\$.**



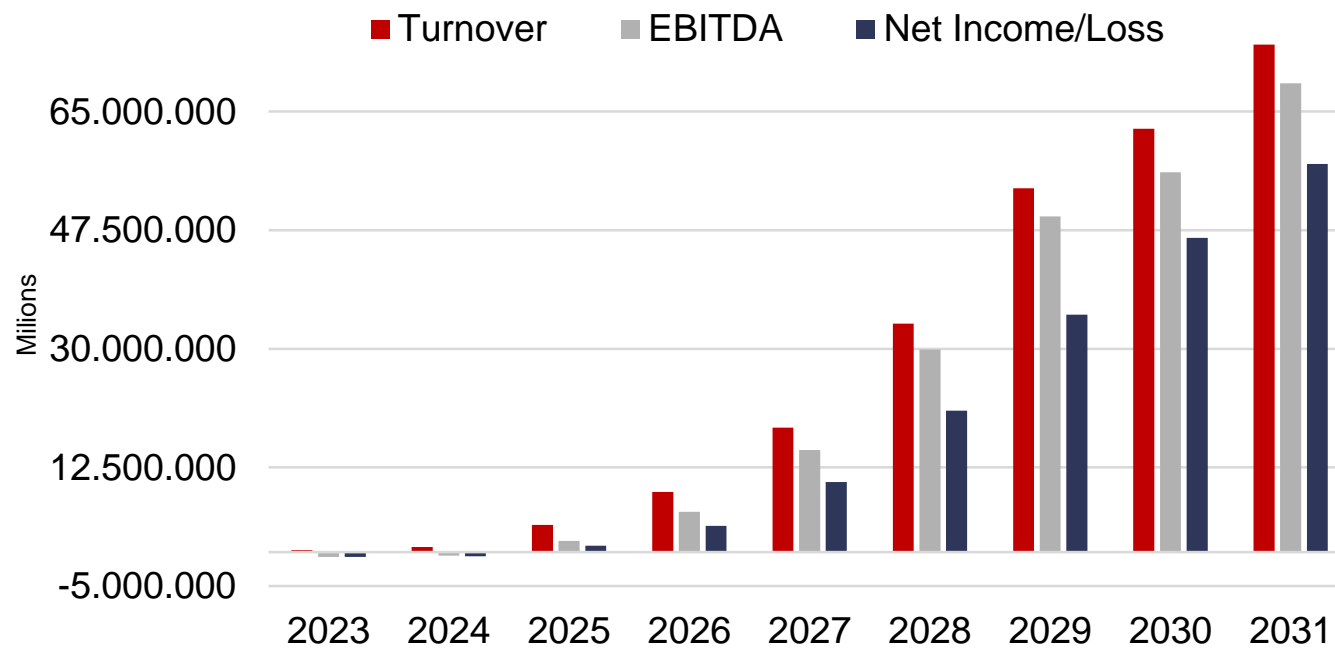
**6% CAGR**

*Source: The Insight Partners 2023*



**The Service**

**A €50k/month per satellite service designed for all space operators.**



**FUTURE MARKETS**

**Insurance Firms**

The insurance market will play a major role in our business development in the next years.

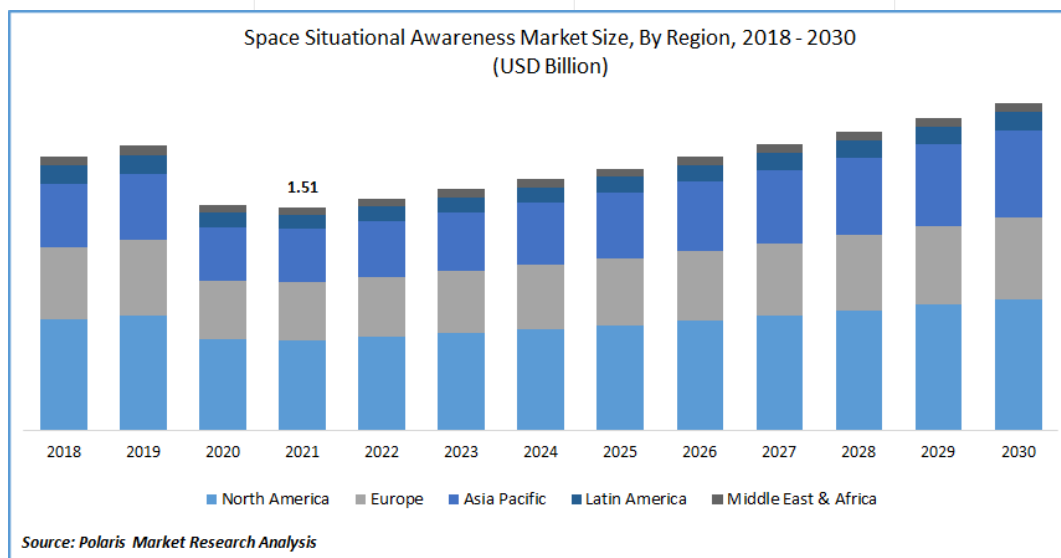


# North American SSA Market



700 M\$ size of region in global market 2021

Fastest growing country-level market in the region



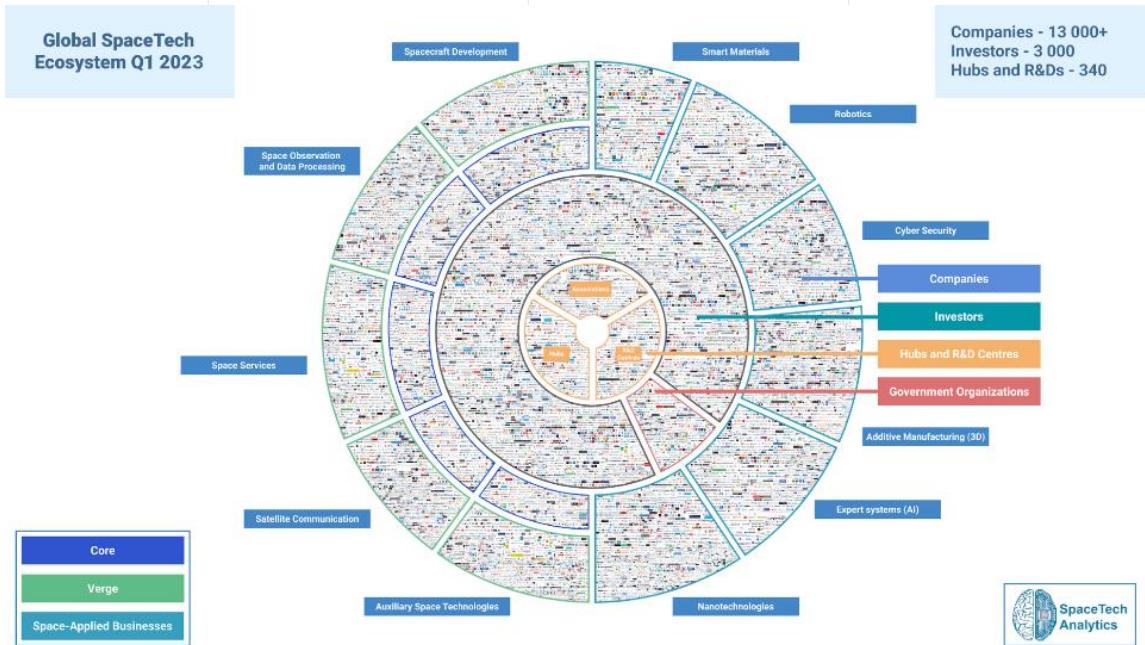
40% of the SSA global market size

8% CAGR (2021-2026)

Source: Polaris Market Research Analysis 2021 & Markets and Markets Research 2021



# Internationalization Goals



On-boarding new customers  
(13.000+ companies)

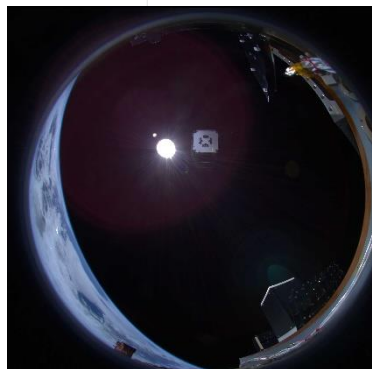
Seeking investors (3.000+)  
for series A round

Consolidation of existing collaborations



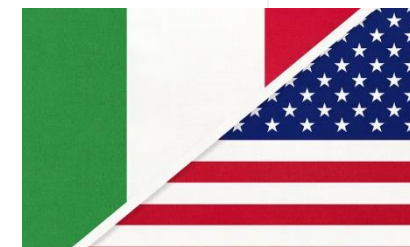
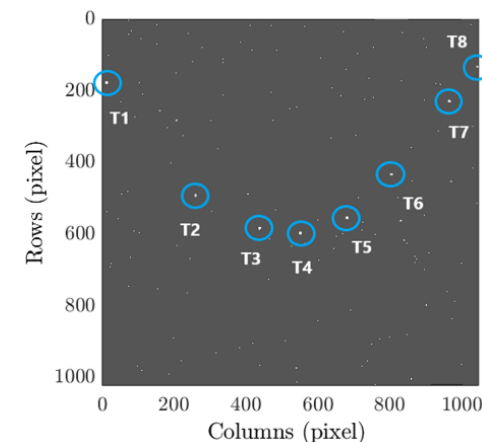
## Go-to market actions

Demo of service by providing data samples



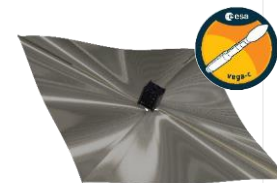
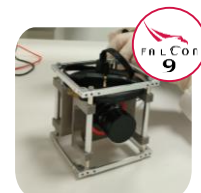
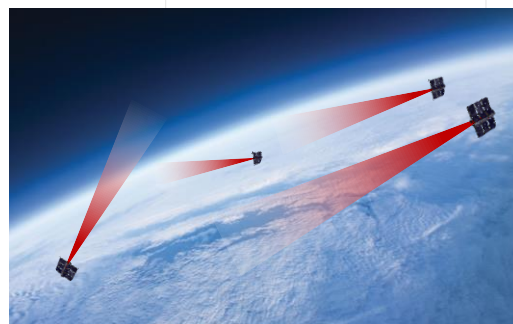
Signing commercial agreements  
for launching our satellites

Preparing to establish an outpost by 2024



## Our Roadmap

A mission  
in the name  
of space  
sustainability.



**2024**

4 Satellite Constellation

**April 2023**

2nd mission: REVELA

**December 2022**

Smart Camera

**July 2022**

1st mission: ALPHA

The mission

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a safer place,**

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DYNAMICS





Thank You

**Making space  
a safer place, together.**

ARCA  
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