

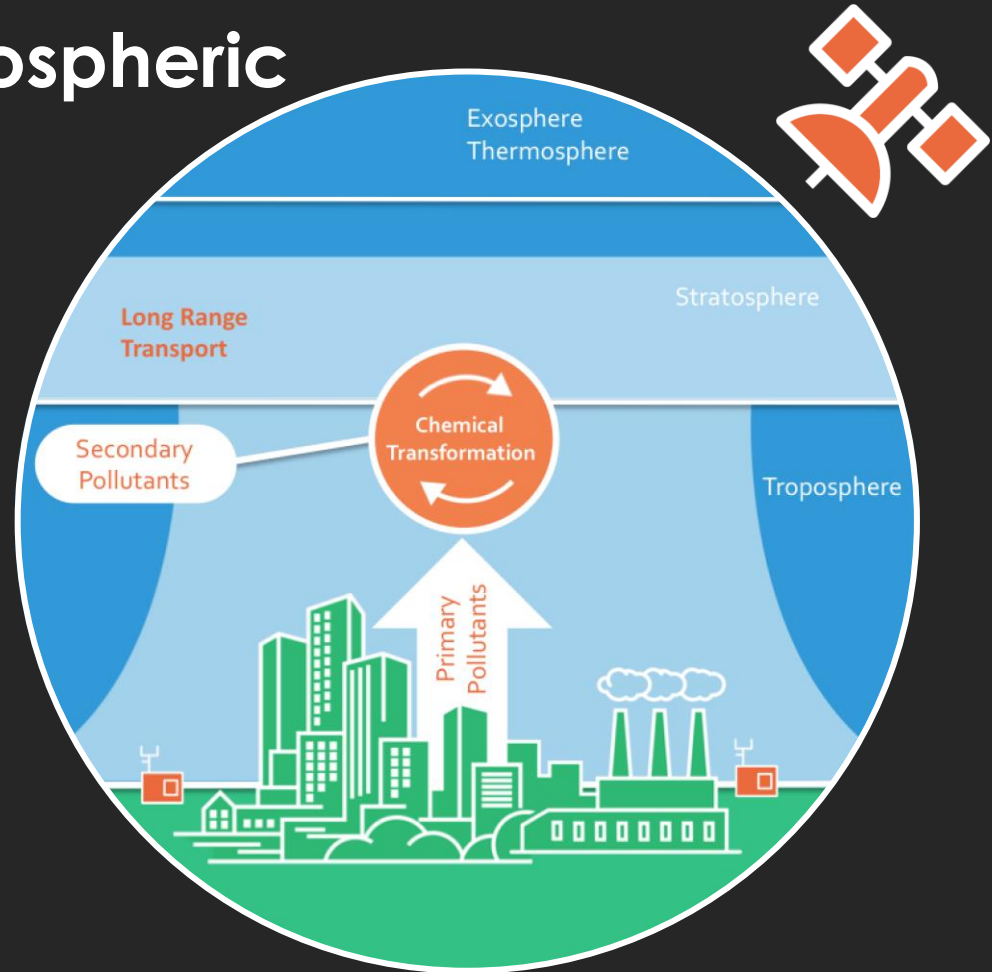


SCEPTERAIR

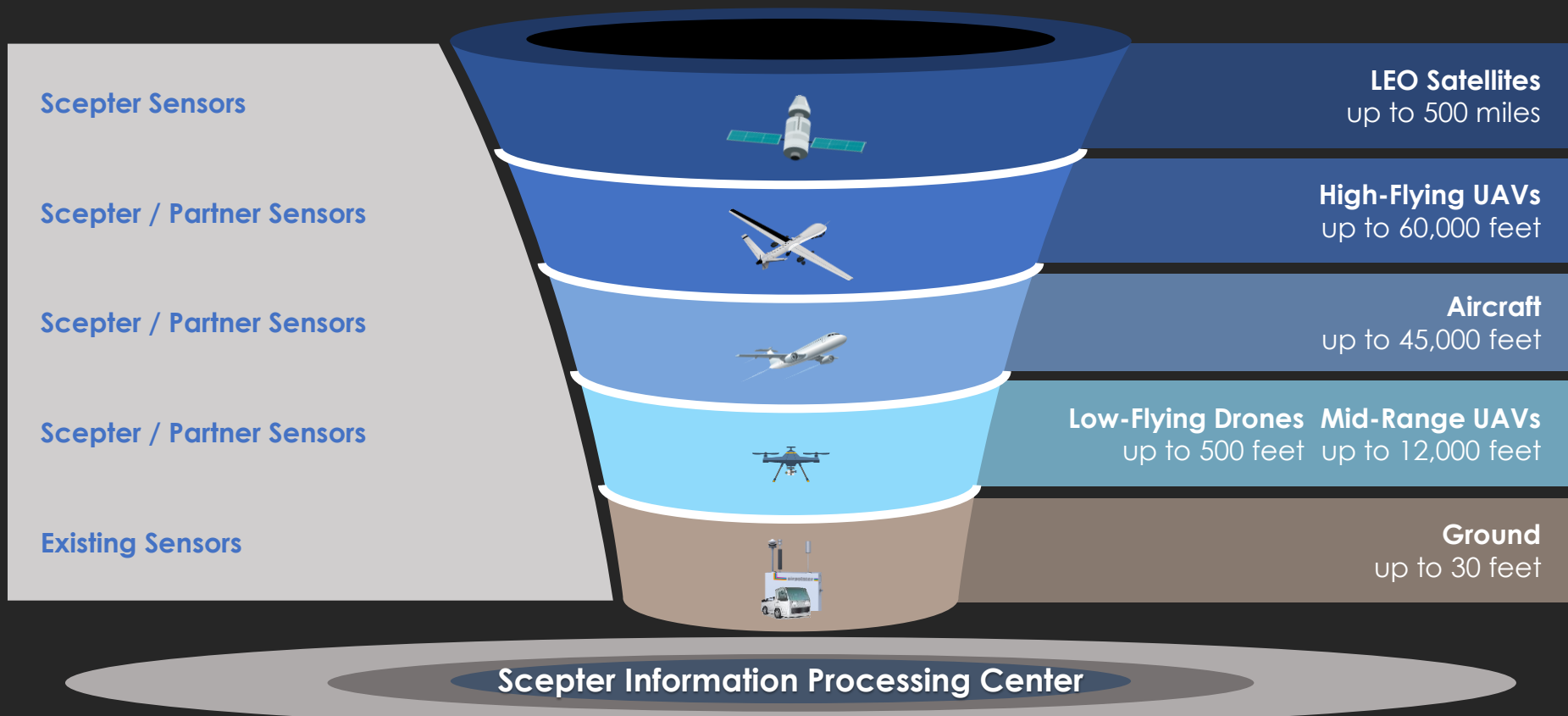
**State-of-the-Art Atmospheric Monitoring via
an Integrated Data Analytics Approach**

Building a Global Atmospheric Monitoring System

- ❖ Integrate and Visualize the Vertical Air Column
- ❖ Tackle the Next Big Data Frontier, Environmental Data



Proprietary, but Leverage Free



Transforming Atmospheric Data Into Actionable Services – “ScepterAir”

Patent: “Atmospheric Sensor Network and Analytical Information System Related Thereto”



Sensors
(Scepter and
3rd party)



Data
Aggregation



Fusion



Analytics &
Machine
Learning



Presentation

Ecosystem Approach



Key Target Markets



Monitoring & Compliance Verticals

Legislated and Self Reporting Needs



Commercial & Government Verticals

Revenue Enhancement, Cost Reduction, Strategic Decision Makings Needs



Climate Vertical

Leadership, Trust and Cost-effective Implementation Needs

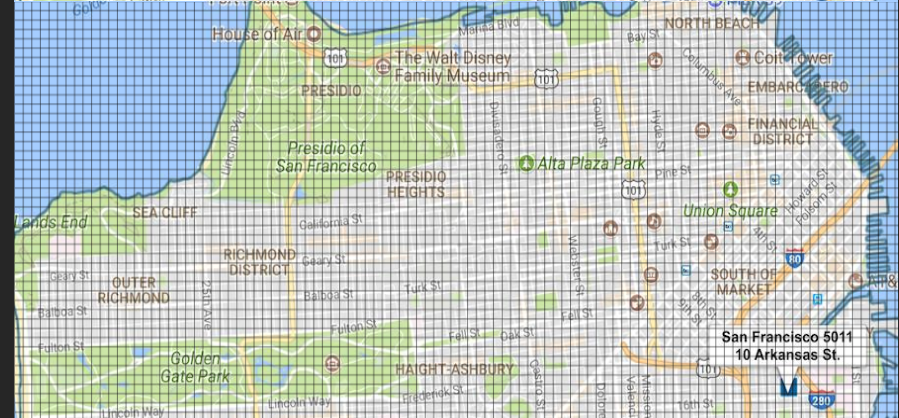
How We Help: Monitoring and Compliance

- ❖ Community Monitoring
- ❖ Big Data Fusion
- ❖ Health Alert Services, for Example

Before



After



How We Help: Commercial Markets

Air Pollution and the Intersection of Healthcare

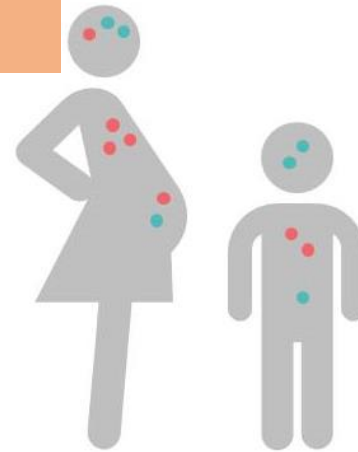


Corporate Concerns of Pollution

- Liability Management
- Risk Mitigation
- Disaster Avoidance
- Compliance
- Corporate Social Responsibility
- Fiscal Responsibility
- Brand Management



Health Effects of Pollution



Caused by Fine Particles

Accepted Effects:

Shorter life
Stroke
Heart disease
Asthma*
Lung cancer
Reduced lung function
Low birth weight

Possible Effects:

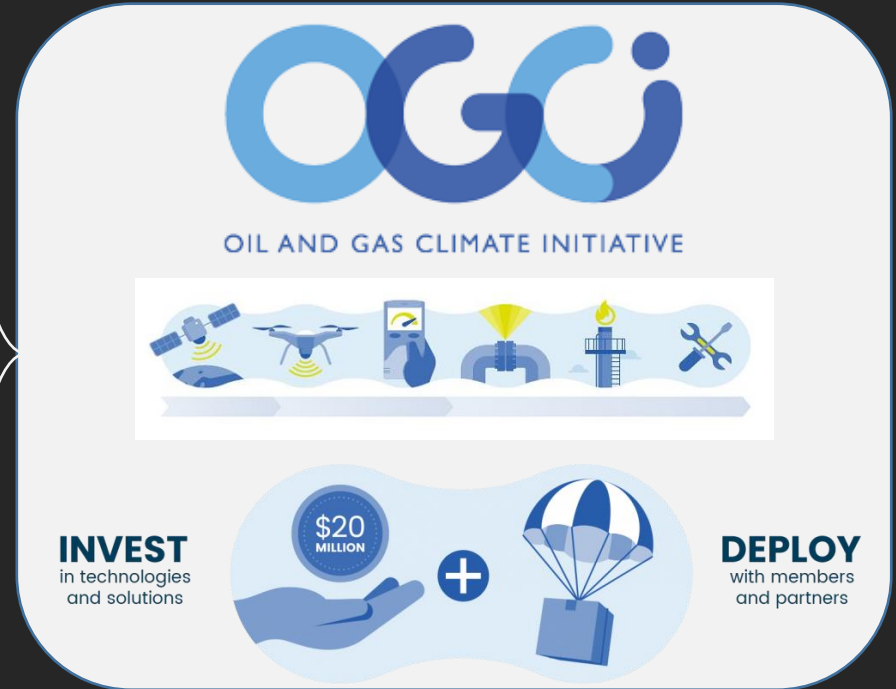
Learning disabilities
Alzheimer's
Depression
Autism
Obesity
Birth defects
Diabetes

How We Help: Climate

Methane Monitoring

SCEPTERAIR

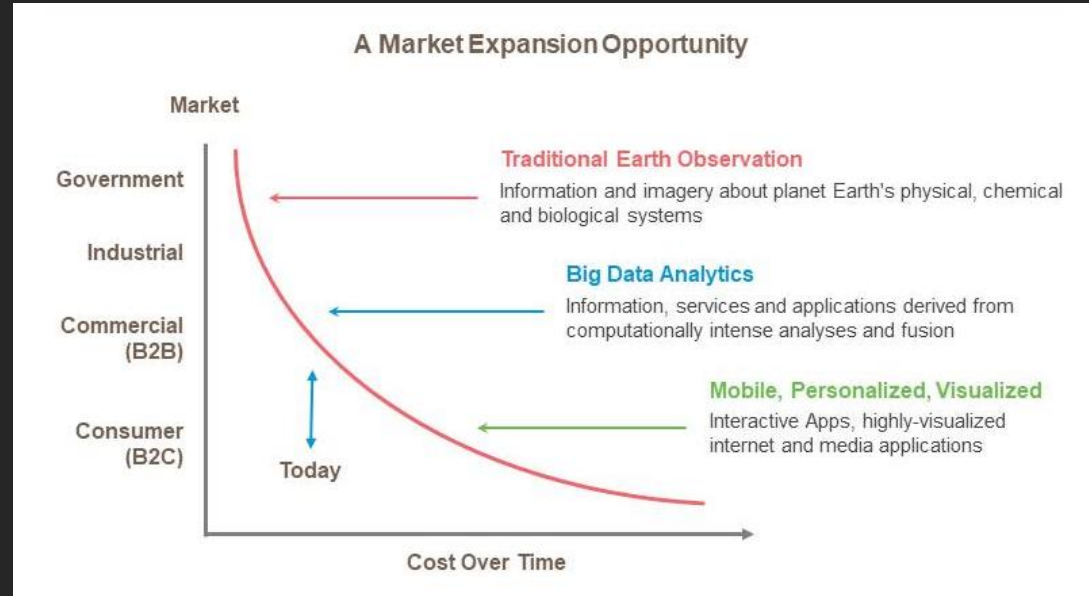
+



We Leverage Market Trends

Unique Timing

- ❖ Lower Cost Access to Space
- ❖ Big Data Analytics, Environmental Data as Next Frontier
- ❖ COTS and Sensors
- ❖ Security, Immutability



Trends

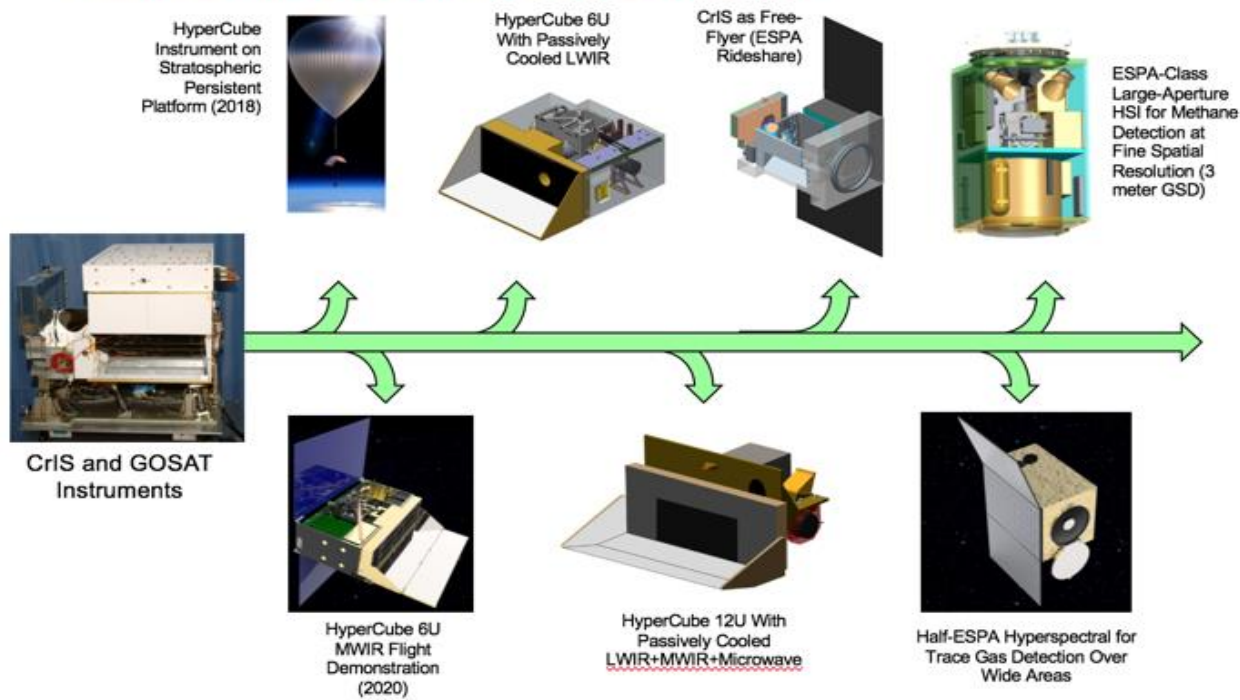
New Space Economy

- ❖ LEO Constellation
- ❖ Global
- ❖ Real time



Trends: Sensor(s) by Harris for Example

Harris is Miniaturizing our FTS Technology for a Family of Low-Cost Hyperspectral SmallSats



“The soul never thinks without a picture” - Aristotle

Trends:
Visualizing Data
Any Vertical,
Any Device,
Any Time



Potential End State

Scepter-Driven, Trusted “Clearing House”



Emerged from Stealth Mode

SPACENEWS



Scepter Inc. unveils plan for global atmospheric monitoring constellation

by [Debra Heller](#) — March 23, 2018

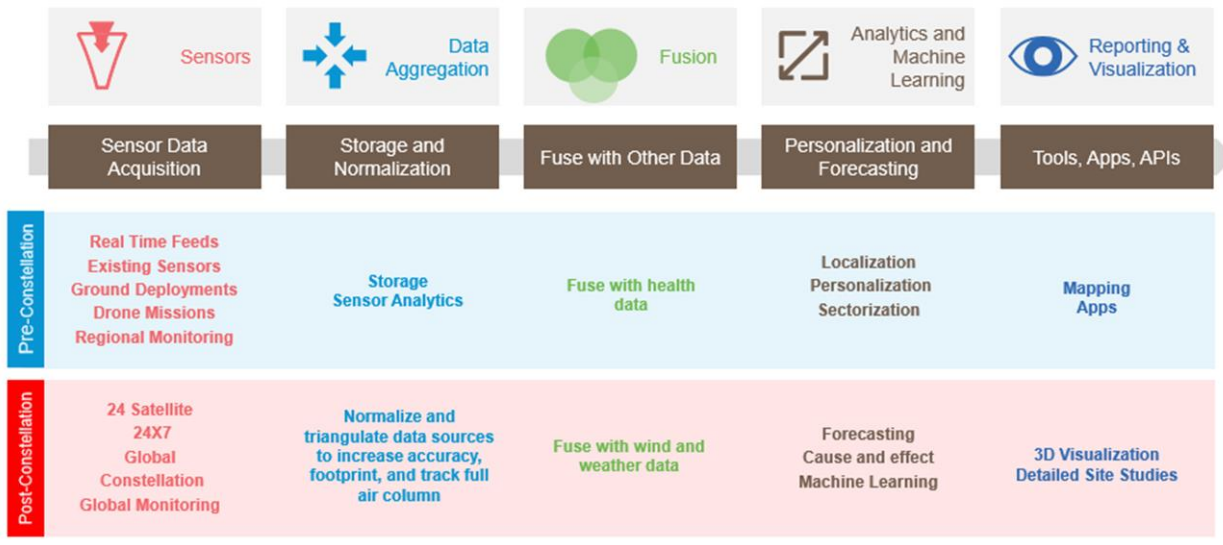


Philip Father, Scepter chief executive, and former DigitalGlobe executive Rafay Khan, discuss plans for a global constellation of atmospheric-monitoring satellites at Space Systems Loral, a Maxar Technologies company. Credit: SSI.

PALO ALTO, California — Scepter Inc., a Silicon Valley startup, unveiled plans March 22 to launch a constellation of satellites to provide global atmospheric monitoring services for government and commercial customers.

Customer Activity Today 1/2: Data Fusion

Building Value Through Actionable Data



Customer Activity Today 2/2: DigitalGlobe Aerosol Optical Depth



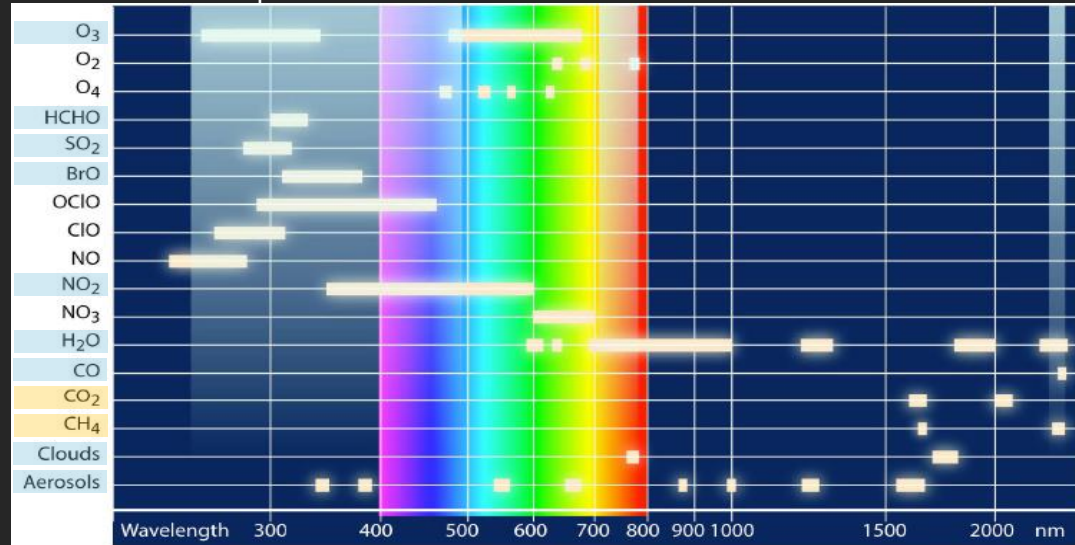
Appendix

Sensors Monitor Air Pollution and Climate

Approximately 25 Species Comprise Baseline Mission

❖ CH_4 and CO_2 are within wavelength range

Example Plot of Wavelength for Different Species



— = Scepter baseline air pollution mission