

# Small Satellites Impact Global Compliance, Standards, Licensing and Data Access Technology - Build a Business Plan to Address these Impacts



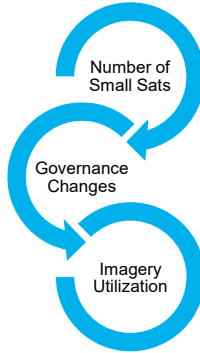
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## Problem

The number of small satellites globally is impacting the ways in which government programs globally have been operated for the past several decades

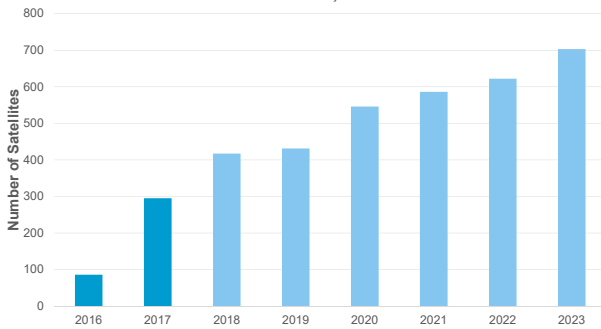
Changes in governance, licensing standards and compliance are occurring from the UN and NATO to nation states.

These changes impact how commercially available small satellite imagery will be utilized commercially and by government clients



## Background

Nanosatellites Launched 2016- 2023



Nanosatellite launches, actual and projected, 2016 - 2023<sup>1</sup>

- Within the next two years, the number of commercially funded earth observation satellites will surpass number of government ones, requiring government agencies to address their use of commercial imagery
- As small satellite owner/operators enter New Space, geospatial governance principles, including technology, processes, and personnel, will become increasingly important

## Governance Challenges Globally

Governance Principle	Current Importance	Future Importance
Interoperability of multisource, multimodal data	Med-High	High
Metadata structure	High	High
Mission driven	Medium	High
Transparency in sources	Low	High
Data sharing	Medium	High
Open data	Medium	Higher
Product sharing	Low	Higher
Quality, accuracy definitions	Low	High
Standards of service	Low	High
Tradecraft specific standards	N/A	High

Geospatial governance globally and its challenges are changing from the United Nations and NATO to nation states. With the flood of sensor data, including small satellite and other data, key governance challenges will include mission driven principles, data and product sharing (EULAs), quality and accuracy definitions, and standards of service specific to tradecrafts.

## Impact on Small Satellite Industry

### Regulation

- Biggest challenge from *Old Space*, still a problem in *New Space*
- How to keep moving forward to make use and access to imagery easier?

### Innovation Cycle

- Challenges can extend the cycle time of innovation to a decade due to regulations and changes in governance

### Other

- Access to data and architecture of accessing data
- Additional impacts

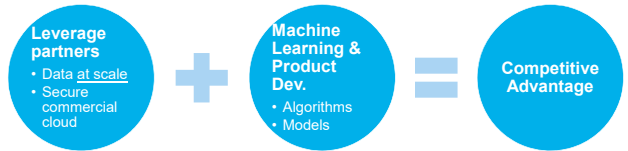
## Build a Business Plan

Small satellite owners and operators should understand who uses their data and in what part of the spectrum.

Build balance between security and capability, pace, agility, governance - agile digital workflow to enable local approval combined with visibility for oversight

The small satellite owner/operator must build a business plan that leverages partners in order to utilize data at scale and through secure commercial clouds.

This will enable Machine Learning and product development that builds competitive advantages through Algorithms and Models



## Conclusion

Global access to data is changing and the architecture of accessing data is changing.

Major market domains and governments globally are wrestling with how the bits and pieces will all fit together.

Through all this the small satellite owner/operator must stay aware of the changes and develop a successful business plan to build upon the opportunity presented by these changes

## References

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