

Baltic Satellite Service





BSS specialises in remote sensing and geospatial intelligence, offering tailored Earth Observation (EO) solutions for clients like governmental organizations, farmers, private companies. The company develops and delivers custom platforms, algorithms, and spatial databases, enabling high-quality monitoring and analysis for forestry, environmental protection, and land management.







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Baltic Satellite Service utilizes a combination of open-access satellite data, such as Sentinel-1,2 and 3 from the Copernicus programme, and commercial satellite products from providers like Planet and Maxar via Airbus, to deliver tailored remote sensing solutions. The datasets are complemented by aerial photographs, drone imagery, and meteorological sensor data, enabling high-resolution, multi-source analysis across diverse environments. The company has developed advanced geospatial platform GeoHub.net for integrating, processing, and publishing geospatial data using industry-standard protocols (XYZ/TMS, WMS, MVT, S3). It is used for forest, agriculture, utility network, flood, fire and other environment event, habitat and parameter monitoring, provision of cloud-free imagery basemaps, different other geospatial data and web Applications of applications, custom tools and ML algorithmsto support its end-users from different industries.





Requirements

In its early stages, Baltic Satellite Service faced challenges in navigating the landscape of existing technologies and identifying the most suitable platforms and data sources for their applications. The integration and management of data from drones, alongside the processing of multi-source datasets such as satellite imagery, aerial photos, and meteorological data, required a high level of technical expertise and specialized training. One of the key requirements for overcoming these barriers has been the ability to build Barriers & Support and retain a team of skilled scientists and developers capable of designing custom algorithms and application-specific tools.





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BSS has a client-centric approach that enables the company to deliver reliable, purpose-driven solutions across different sectors. Their success comes from a strong background in GIS and geospatial technologies and their involvement in field-based projects and research initiatives supported by ESA, Interreg, Eurostars, and other. Among the company's early achievements were the development of a forest health risk monitoring platform, a biotope monitoring tool and a greenhouse gas emissions monitoring system, both of which included remote sensing data for environmental monitoring and helped position the company as a credible and capable EO service provider.

Understanding the specific needs of the customer, with a clear awareness of the technical capacities and limitations of the team and tools is really important for success. A solid business plan defining what product or service is being developed, who it serves, and resources (IT, scientists, software) is needed. Equally critical is understanding the available types of data, how to access and process them efficiently, and which existing platforms and technologies can be leveraged to reduce development time, cost and complexity.



Lessons Learned



