



SBYSOFT

COMPANY PROFILE

Telecommunications, Data Science
Consultancy & Software Services

Empowering Networks with Intelligent
Data & Smart Automation





At a Glance

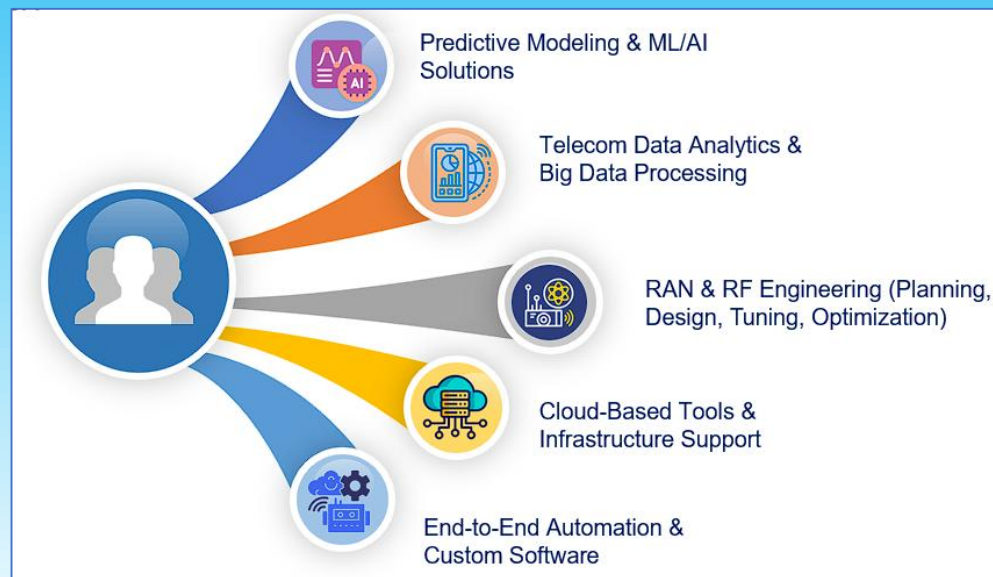
Who We Are

- ✓ Innovation-Driven Services
- ✓ Scalable & Flexible Solutions
- ✓ Accuracy, Efficiency & Transparency
- ✓ Global Expertise, Local Focus

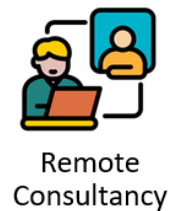
Global Experience

- Collaborated with leading telecom vendors, integrators, and operators:
- Major OEMs, System Integrators, Mobile Network Operators across Europe, Asia-Pacific, and Africa

Core Areas of Expertise



Engagement Models





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Our Services

Professional RAN & Data Science Services

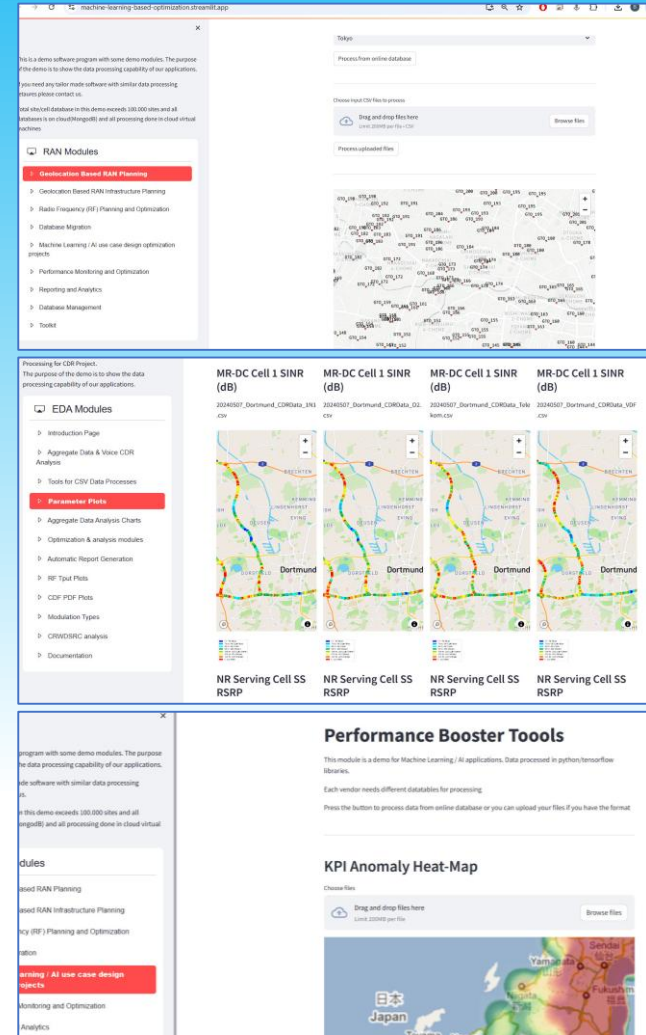
- Custom Analytics & Business Intelligence Reporting
- Solution Integration & Tool Migration
- Full-Scope Project Management

Radio Network Engineering

- RF Planning, Frequency Design & In-Building Solutions
- RF Model Tuning & Propagation Calibration
- KPI-Based Optimization & Audits

Software & Automation

- Bespoke Tools & Telecom Integration
- Drive Test & Benchmark Automation
- Secure Data Pipelines & Visualization (SQL, Tableau, APIs)





Selected Case Studies

AI-DRIVEN vRAN PLANNING

- **Project Scope:** Machine Learning for Group Center and Unit Optimization in 4G/5G Networks
- **At A Glance:** Efficient Virtual RAN Planning for Group Center (GC), Virtual Centralized Unit (vCU), and Virtual Distributed Unit (vDU) Mapping: A Real Project Case.
- **Locations:** Tokyo, Japan / Turkey, İstanbul / Dubai, UAE
- **Services Provided:** Automated Virtual RAN planning tool developed by using K-means clustering machine learning algorithm to plan and optimize Group Center (GC), Virtual Central Unit (vCU), and Virtual Distributed Unit (vDU) mapping.

AI-DRIVEN BENCHMARKING

- **Project Scope:** Automated Data Processing & Reporting Framework for Telecom Benchmarking
- **At A Glance:** A fully automated, secure, and scalable data processing and reporting system was developed for Techbros FZCO to handle large-scale telecom benchmarking projects across Europe. The solution included a SQL database, custom data aggregation software, and Tableau-based interactive reports.
- **Locations:** Client HQ: Germany, Project Scope: Pan-European (Multiple countries across Europe)
- **Services Provided:** Automated Virtual RAN planning tool developed by using K-means clustering machine learning algorithm to plan and optimize Group Center (GC), Virtual Central Unit (vCU), and Virtual Distributed Unit (vDU) mapping.

RF MODEL TUNING

- **Project Scope:** Precision RF Model Tuning for Multi Band Mobile Networks Client Challenge
- **At A Glance:** Efficient Virtual RAN Planning for Group Center (GC), Virtual Centralized Unit (vCU), and Virtual Distributed Unit (vDU) Mapping: A Real Project Case.
- **Locations:** Tokyo, Japan / Turkey, İstanbul / Dubai, UAE
- **Services Provided:** Automated Virtual RAN planning tool developed by using K-means clustering machine learning algorithm to plan and optimize Group Center (GC), Virtual Central Unit (vCU), and Virtual Distributed Unit (vDU) mapping.

* See appendix slides for full one-pager overviews



Selected Case Studies

AI / DRIVEN vRAN FAULT ANALYSIS

- **Project Scope:** Preemptive Fault Detection and Analysis for vRAN
- **At A Glance:** A comprehensive ML-driven automation initiative developed to enhance customer support, fault isolation, and performance optimization for a major Japanese mobile network operator, KDDI, in collaboration with Ericsson.
- **Locations:** Tokyo, Japan
- **Services Provided:** ML-based fault detection & optimization automation, Custom software tools for performance analysis, Advanced configuration and event analysis, Integration into existing ML automation frameworks

RAN DATABASE MIGRATION AUTOMATION

- **Project Scope:** RF Planning Database Migration Automation
- **At A Glance:** A cloud-enabled database migration and automation project for Rakuten Mobile's 4G/5G network, transitioning planning operations from Atoll to Infovista Planet Microservices while integrating advanced analytics and automated RF model tuning.
- **Locations:** Tokyo, Japan / Istanbul, Turkey
- **Services Provided:** End-to-end database migration (Atoll → Infovista Planet Desktop & Microservices) 4G/5G RF model validation, tuning, and transformation. Cloud-based software development for automated daily updates. Intelligent model selection and geolocation correction. Big data analytics for network optimization.

ML BASED FIBER COST OPTIMIZATION

- **Project Scope:** ML based Algorithmic Fiber Cost Optimization & Data Restructuring for a Global Vendor (Country: Germany)
- **At A Glance:** Development and delivery of two automation-focused planning case studies for Rakuten Germany, focused on optimizing fiber network cost planning and nationwide RF data reformatting.
- **Locations:** Tokyo, Japan / Germany (Remote)
- **Services Provided:** Multi-layer and multi-vendor fiber cost calculation algorithm. Automated RF planning data restructuring. Nationwide cell parameter adaptation for evolving project requirements. Data processing pipeline design and implementation

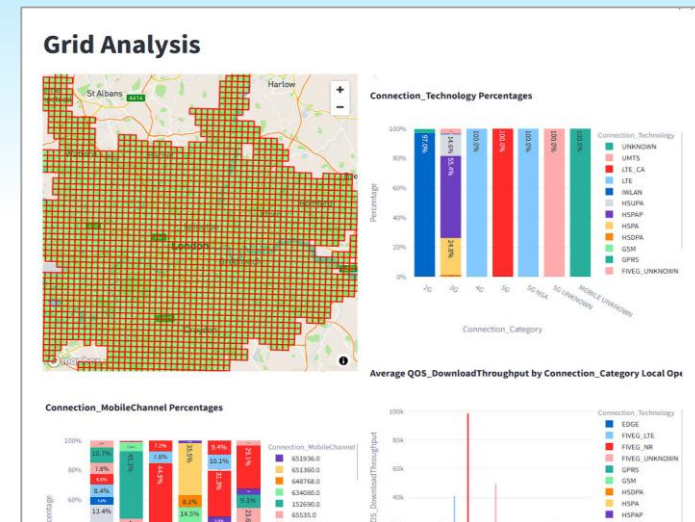
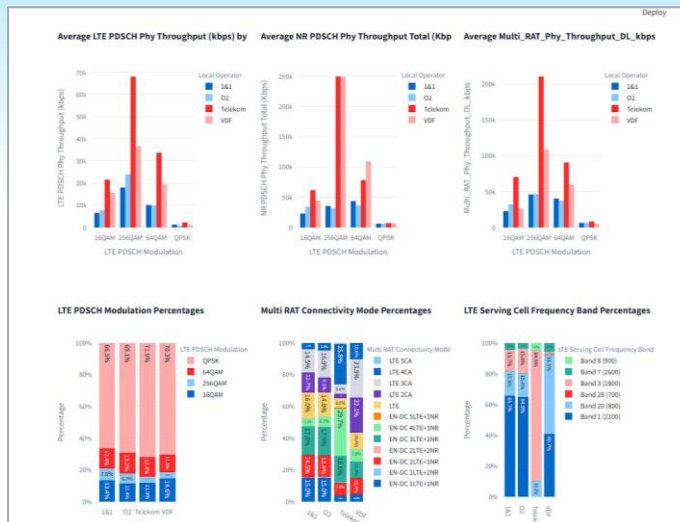
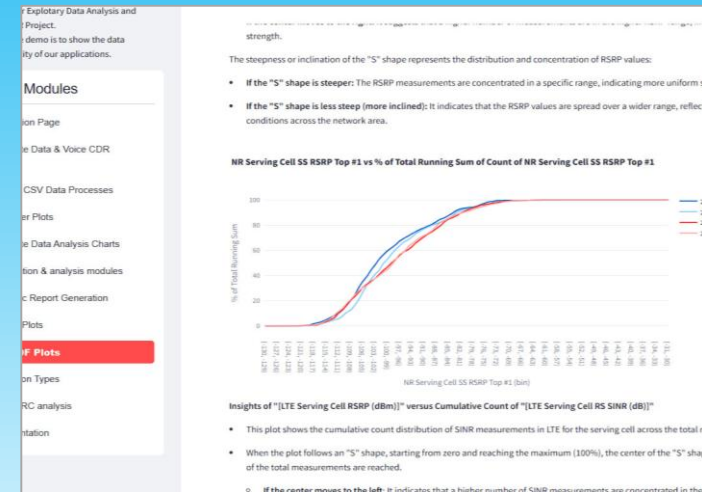
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Telecom + AI Integration

- ML-Based Fault Isolation & KPI Anomaly Detection
- Automated Load Balancing & Coverage Optimization
- Intelligent RF Propagation Model Selection
- AI / ML Driven Planning & Parameter Optimization
- Real-Time Data Aggregation & Analysis





• vRAN/Open RAN Engineering

Network Design & Architecture

Scalable Open RAN/vRAN solutions for greenfield and brownfield deployments, following O-RAN and cloud-native architecture principles.

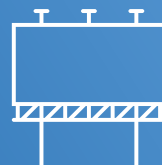
KPI Strategy & Performance

Define vRAN KPI layers with customized monitoring across cloud stacks and radio layers, enabling real-time insights through raw counter analytics.

Network Design & Architecture



Network Dimensioning



Network Dimensioning

Our capacity models optimize vRAN node (OCU/ODU) and DC dimensioning based on traffic profiles, radio design, and infrastructure constraints.

KPI Strategy & Performance



Testing Environments



Testing Environments

We deliver lab setups and MVPs for full Open RAN validation, enabling automated, end-to-end testing and continuous integration of vRAN components.



Why Choose SbySoft?



Deep Telecom Experience

4G/5G, RAN, vRAN, O-RAN,
Cloud RAN

AI-Driven Results

ML algorithms designed for
telecom use cases

Cross-Disciplinary Talent

RF, software, cloud, data
science

Tool-Agnostic Integration

Planet, Atoll, Infovista, Tableau,
Azure, AWS & more

Custom Solutions

Outperform legacy tools and reduce
manual effort by up to multiple times



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