

ITU Regional Innovation Forum on
**Bridging the Digital
Innovation Divide**

*Fostering Digital Entrepreneurship
and Startup Ecosystems*

21-23 November 2018
Oslo, Norway

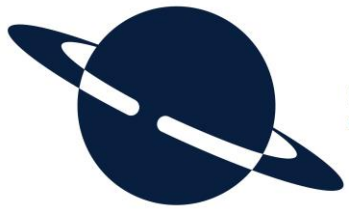
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ITU Regional Initiative for Europe on ICT Centric Innovation Ecosystems



SESSION 1

UNDERSTANDING THE INNOVATION DIVIDE & ITS CHALLENGES



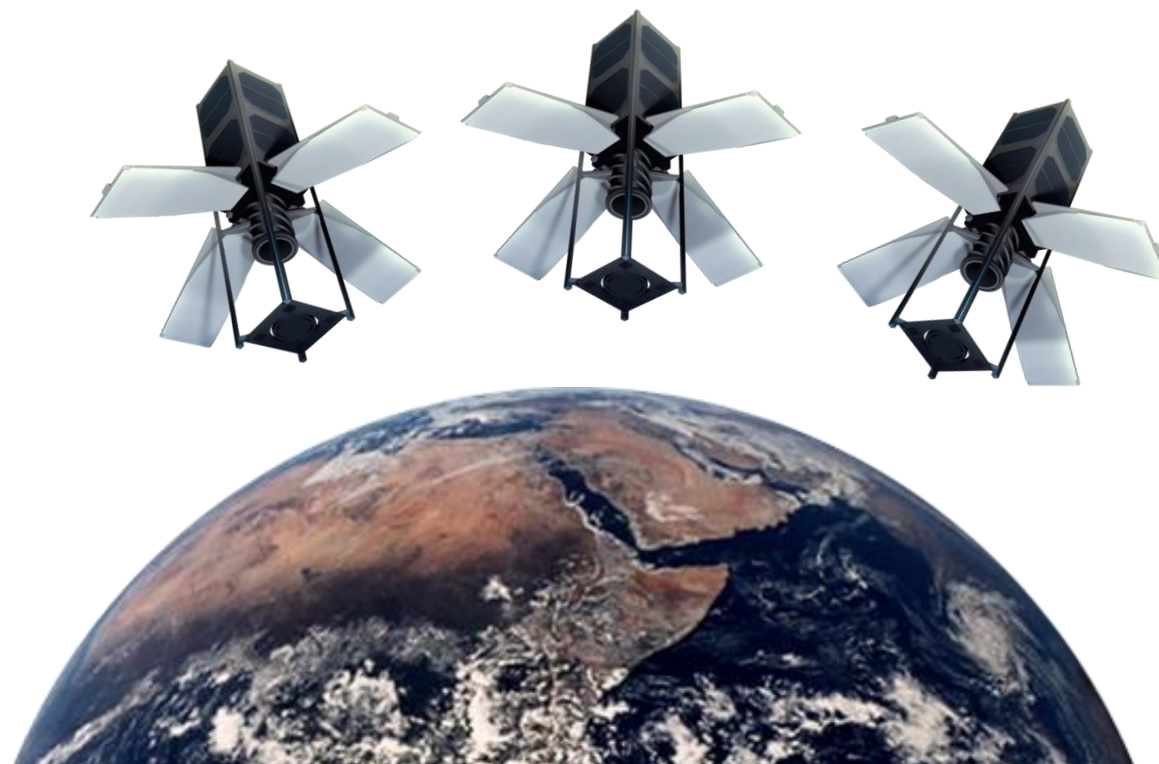
SATREVOLUTION

Real-time Earth observation Constellation (REC)

Radosław Łapczyński

- Co-Funder and CSO of SatRevolution
- Over 15 years of experience in managing tech companies
- Chairman of the Supervisory Board of T-Bull – leading Polish mobile game developer, CEO of Silesian Catalysts, a company developing advanced analytical models for chemical companies

- **Real-time Earth observation Constellation (REC)** – will provide earth images with
- Uniform, detailed satellite images will facilitate creation of mobile service utilizing AI in image processing
- Meaningful information obtained by image analysis system will find application in multitude of applications



Source: NASA



SATREVOLUTION

Smart City

AI based image processing system for analysing satellite images to mine useful data

Information provided by system for numerous Smart City applications including:

- Air pollution monitoring
- Urban climate surveillance
- City ventilation
- Urban planning
- Dynamic floodplains maps
- Identification of pipe leaks
- Municipal fees verification (property tax etc.)
- Monitoring remote infrastructure assets (roads, remote buildings)



Source: Information Age

PRACTICE

SatRevolution

Polish company seeking to revolutionize the way people use satellite data thanks to groundbreaking mobile service processing satellite images

• Name / Organization • Country • Tagline, 1-3 sentence description

TYPE



Guiding
Innovation
Dynamics



Building
Innovation
Capacity



ICT Integra-
tion into
Key Sectors

X

Indicate main focus area / type

GOVERNANCE

- Grzegorz Zwoliński, COO
- Radosław Łapczyński, CSO
- Damian Fijałkowski, CFO
- Team of 20 engineers

• Organiz. structure • Management & Institutional framework • Competencies

KEY ACTIVITIES

- Creation of Real-time Earth observation Constellation (**REC**)
- Development of efficient image analysis systems utilising artificial intelligence and machine learning algorithms
- Designing, manufacturing and integrating of nanosatellites
- Testing of space hardware
- Sales of nanosatellites' platforms (**NanoBus**) and other satellite components
- Development of new Earth observation technologies
- Partnership with Airbus Poland and Pwc in creating space SME accelerator

• Mechanisms • Processes • Activities • Events

GOALS

- Launch of **Światowid** in April 2019
- Development of prototype nanosatellite equipped with deployable optical module – **ScopeSat**
- Development of EO constellation composed of numerous **ScopeSats**
- Mobile service providing customers with meaningful information obtained by **AI** from uniform satellite images

• Objective • Target stakeholders • Desired outcome for ecosystem

RESOURCES

- Initial investment of \$1.5 M for development of Światowid and NanoBus platform
- Government funding for testing and commercialization of NanoBus
- Seeking investment for Real-time Earth observation Constellation (**REC**) development
- Cooperation with Polish Technology Development Centre, AGH University, Grenoble University Space Centre

• Financial • Non-financial • Sources • Partners

ACHIEVEMENTS

- **Światowid** – Poland's first EO satellite
- **KrakSat** –satellite equipped with groundbreaking ferrofluid flywheel
- **AMICal Sat** – Grenoble University's aurorae observing satellite
- **NanoBus** – flexible nanosatellite platform

• Results • Evidence of impact • Scalability • Replicability

Contact us:

Radosław Łapczyński

SatRevolution S.A.

Stabłowicka 147

54-066 Wrocław

Poland

+48 501 715 075

r.lapczynski@satrevolution.com

www.satrevolution.com

