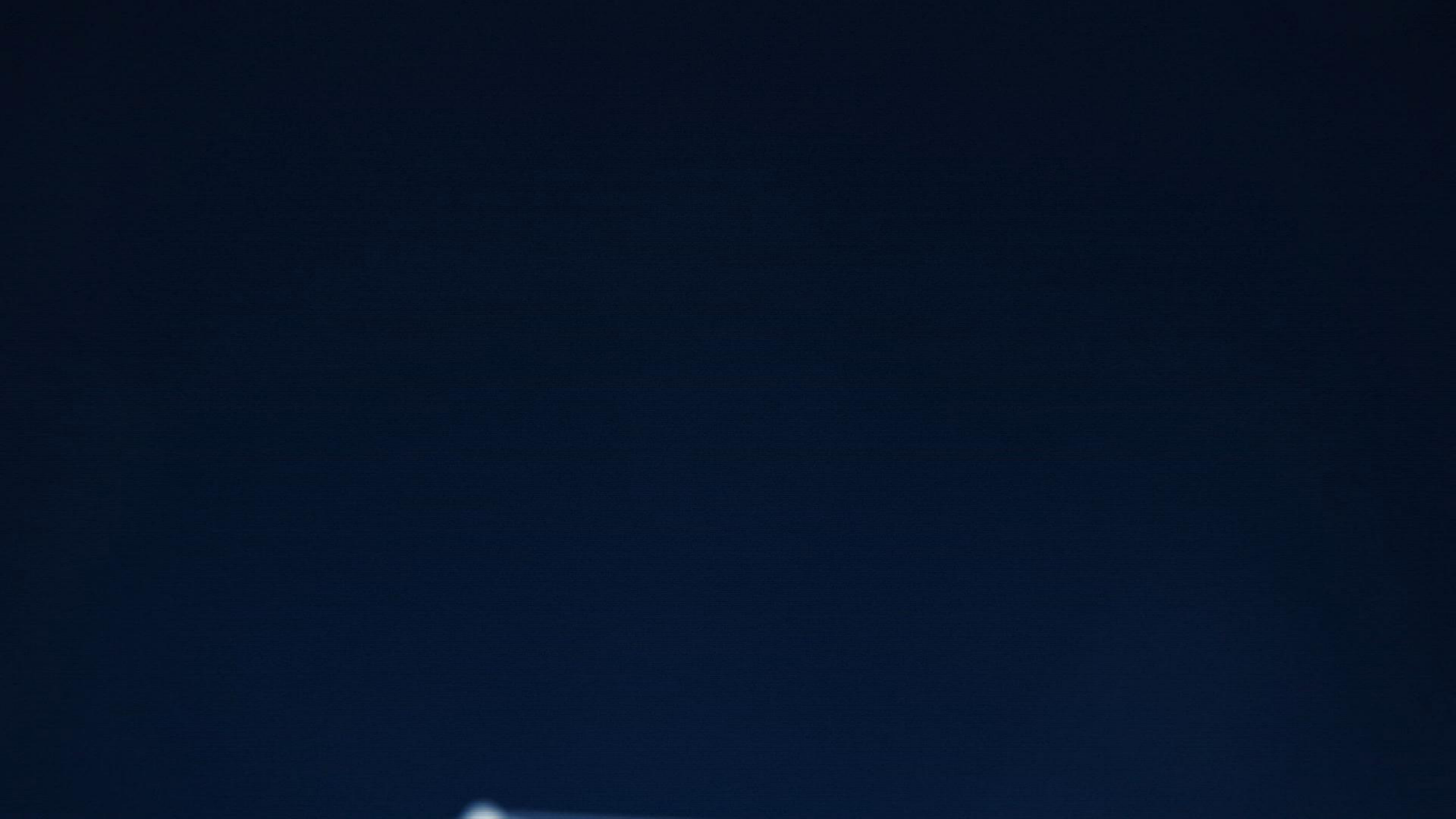


MATERIAALITUTKA- TEKNOLOGIA

Case: **Spectral Engines Oy**

Suomen sata uutta mahdollisuutta 2018-2037
Yhteiskunnan toimintamallit uudistava radikaali teknologia

Jarkko Antila, toimitusjohtaja

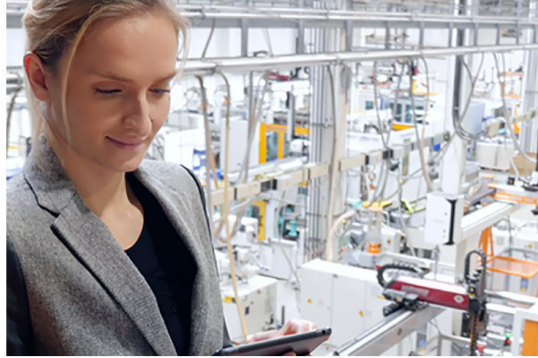
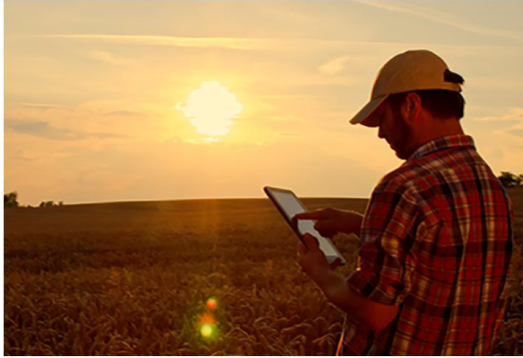


FUTURE SENSORS



PRACTICAL APPLICATIONS

now or in the near future



SMART AGRICULTURE

Quality control of raw materials and optimization of resources

Grains, tea, cocoa, coffee, feed etc. (moisture, fat, sugar, protein)

SMART INDUSTRY

Optimized performance and production, digitalization of supply chain

Solid powders or liquids in process industry, composition of plastics, nutrients, pharmaceuticals, ethanol, food, feed, beverages (moisture, sugar, protein, alcohol, drugs)

SMART HOMES

New applications for the digitalized homes

Concepts include textile sensing and automated washing machines, food scanning, smart refrigerators etc.

PORTABLE DEVICES

Easy on-site analyzers for non-experts

Inexpensive narcotics screening device for police, hand-held quality inspection tools, anti-counterfeit detector for pharmaceuticals, explosives identification

FINLAND'S POSITION IN MATERIAL SENSING



World leader in bringing spectral sensing to the masses.

Winner of the **EU Foodscanner 1M€ competition.**



Pioneer in spectral imaging



Origin of all Finnish spectral sensing technologies



UAV-solutions for agriculture



Nanosatellites opening new era in space business



It makes sense.



@SpectralEngines @jarkkoantila #spectralsensor