CeTRI

The Wide Sense Concept and New Focus Areas in Sensing

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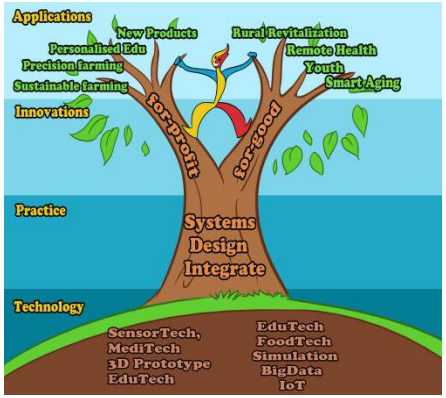

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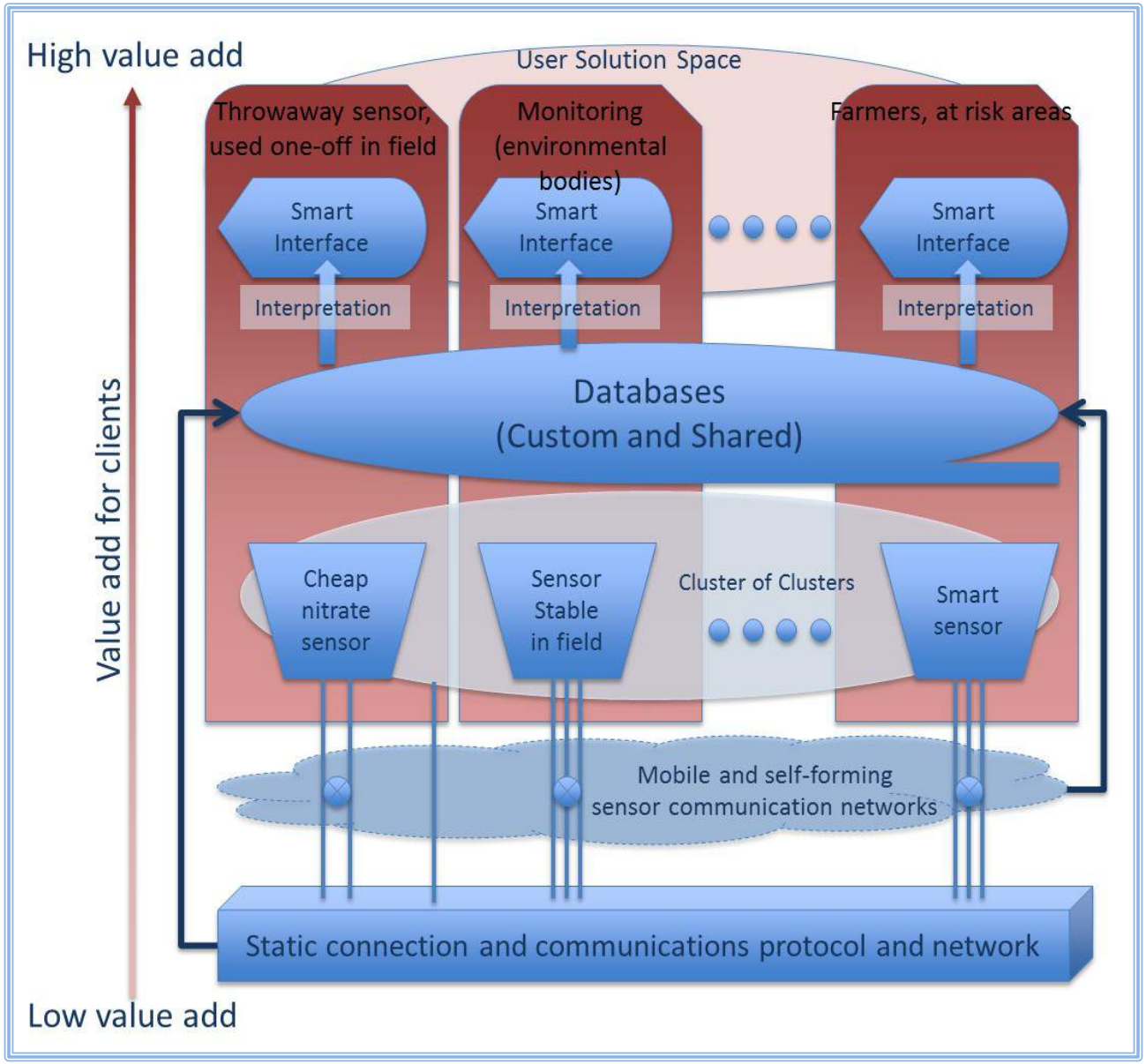

IBM

Outdoor Sensors Supported:

Soil Moisture (x3)
Soil Temperature (x4)
Nitrate/Phosphate (On trial)

Anemometer
Wind Direction
Air Pressure
Relative Humidity (Air)
Air Temperature
Solar Irradiation Estimate
Ultra Violet
Infrared
Dust

pH
Conductivity
Oxidation-Reduction Potential
Ammonia
Dissolved Oxygen
Turbidity
Water Quality (In development)

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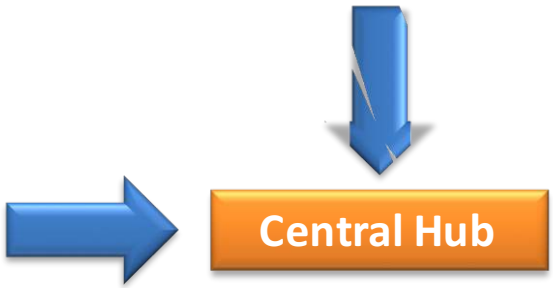
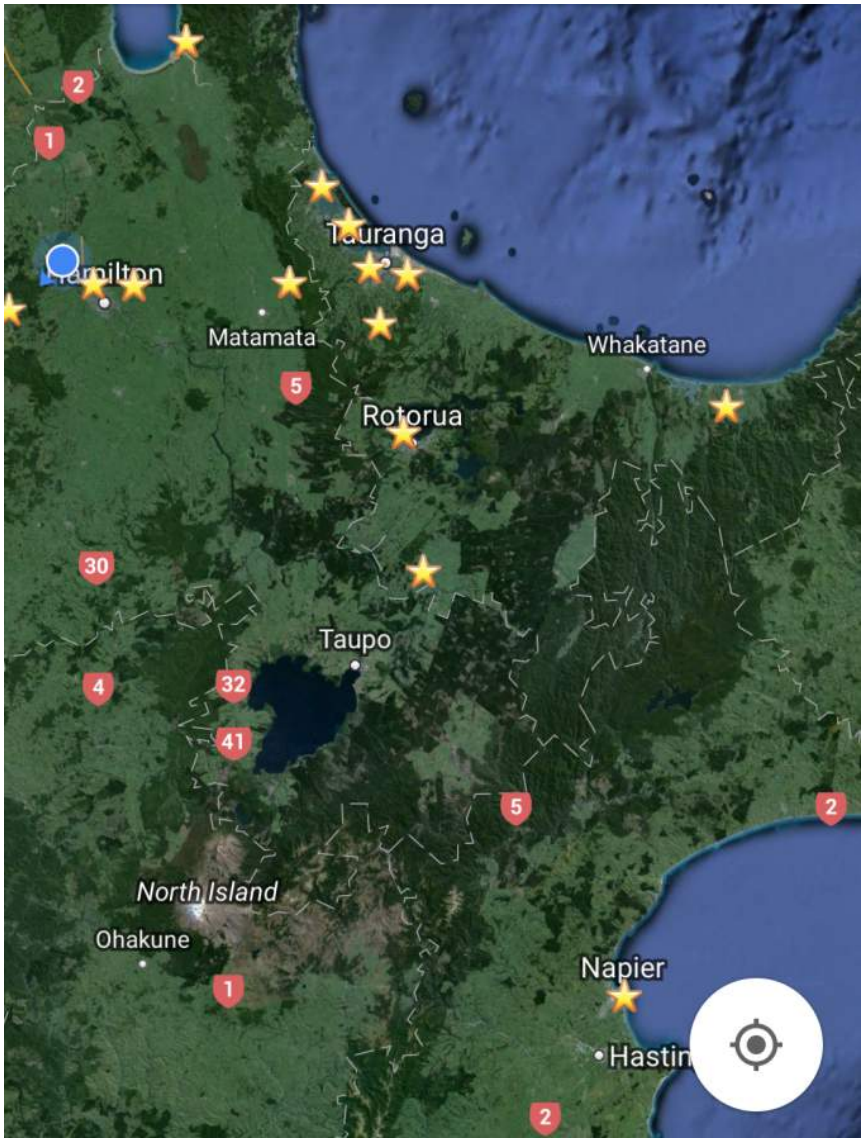
Indoor Sensors Supported:

Temperature
Relative Humidity (Air)
Light Level
CO Level
Power Use (x10)
Dust

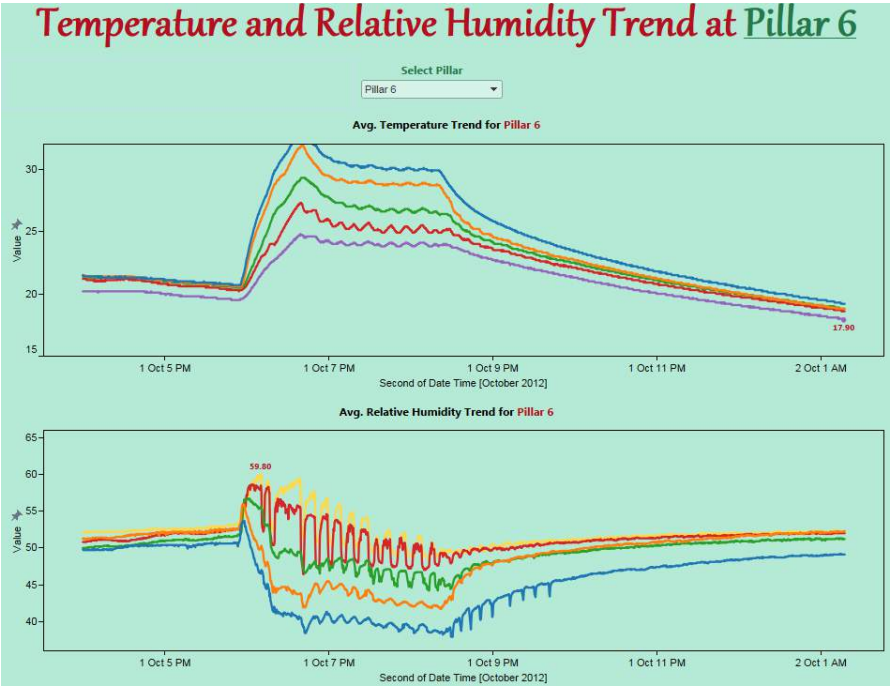


Google / IBM Cloud + Tableau

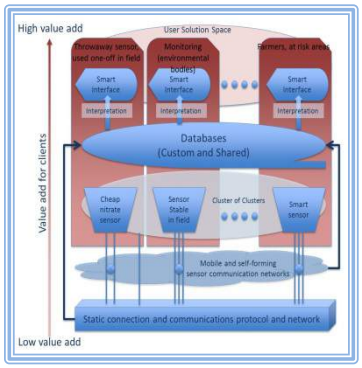
IBM



South Island
Whangerei (TS Solutions)
Middle North Island
International



New Focus



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Novel Micro and Nano Sensors
Specialist Chemistry Capability
High Definition 3D Printing
Specialist Design Capability
Ability to Integrate

Practical examples
NP Sensor as platform tech
Dynamic Fruit Monitoring
Human performance and bio-systems
Health Initiatives

Dynamic impact on Complex Adaptive Systems
Dynamically monitor environment
Simulate solutions with Live Data
Influence feedback into environment
"Dynamically influence complex and complex adaptive systems with the aim to thrive and build resilience"

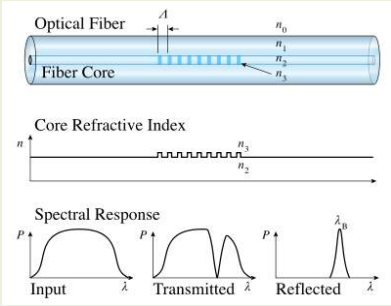
Practical examples:
Energy independent communities
Dynamic crowd influence
Health Systems (Asthma, Silver Economy)
Affordable Precision Agri

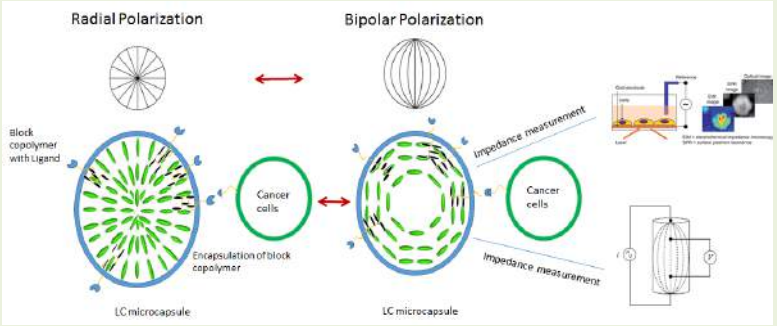
New Focus

(We are looking for funders/Collaborators)

Bragg Diffraction in Optical Fibres

Myriad known methodologies that can be used to create various sensors – the focus is on FFF (Form, Fit and Function), low cost, low energy use, high reliability and accuracy.





Smart Nano Sensors

Biological and nano-systems, for example by using Liquid Crystal Micro droplets methods

Live Culture Sensors

Genetically adapted live cultures can be sensitive to specific substances. We have prototyped the platform technology for this method. Focus on high sensitivity, accuracy, low cost, low energy use