VORTEX IoT

Control in the Internet of Things

Who we are – Co-Founding Management

Non-Execs

Dave Seaton

25+yrs in Corporate Finance, Facilities Management & Outsourcing

Adrian Sutton
Managing Director

Successful executive with a background in programme management, business development and delivering tech enabled business transformation. Adrian is the commercial lead of the business and is vastly experienced in shaping & implementing cloud technologies and innovative business models.

Behzad Heravi
Director of Innovation

Award winning Computer Scientist highly skilled in product R&D. PhD in Communication Systems, MSc in Aerospace Engineering and a BSc in Mechanical Engineering. Behzad is a research fellow at UCL and both passionate and driven by innovation and embracing emerging technologies.
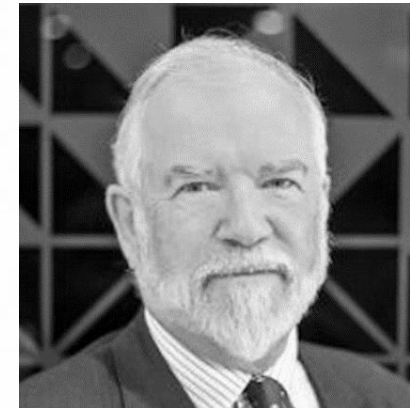
Nick Beckett
Finance & Product Director

Highly experienced FD having managed and guided a business to 500% growth. Nick has also designed and authored software products himself with a focus and expertise in mobile & field based resource & asset management

Alex Dyce

Alex has 30 year Financial Services background and Investor in IT SMEs with RFID, Data & Cyber solutions.
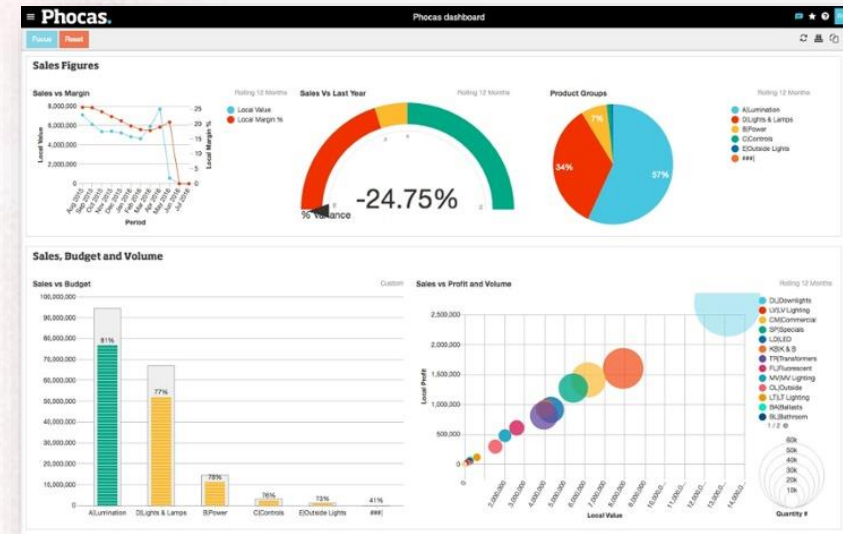
VORTEX IoT

What we do

Vortex IoT build sensors and networks for harsh environments where conditions are hostile, power supply is limited, AI is needed & data security is critical

VORTEX IOT

What we do

Vortex IoT provides practical solutions for managing the performance, condition and cost of high value assets by generating sensor data that enables insight, smart decisions and Machine to Machine Interactions

Where we are

Focus

Industrial IoT Solutions

Verticals with High Value Assets

Repeatable Propositions

Leading Edge Tech

IoT Sensors for Hostile Conditions

Cognitive Mesh Network

AI & Secure Data Encryption

Swansea based

£1.3bn Digital City deal

Swansea University IoT focus

Access to Talent & Grants

First 6 months

Revenue Generating

SaaS/Token Revenue Model

Innovate UK Grant Awards

Blue-Chip Clients & Partners

Investment Ask

£500k in return for 30% equity on a £1.7m (Post New Money)

£200k raised via SFC, Angel & Co-Funding from Dev Bank Of Wales

To fund:

Working Capital, R&D, People

Exit Strategy

Trade sale within 3 – 5 years

Yr 4: Money multiple >9x / IRR > 70%

Note: anticipated returns are based on growth plans being delivered, but are not guaranteed

VORTEX IoT

Which business problems we solve

- ➢ Asset Performance Management
- ➢ Remote Condition Monitoring
- ➢ Regulatory Compliance
- ➢ Health & Safety
- ➢ Harsh Environments
- ➢ Data Enabler for Machine Learning

VORTEX IoT

Heavy Industry
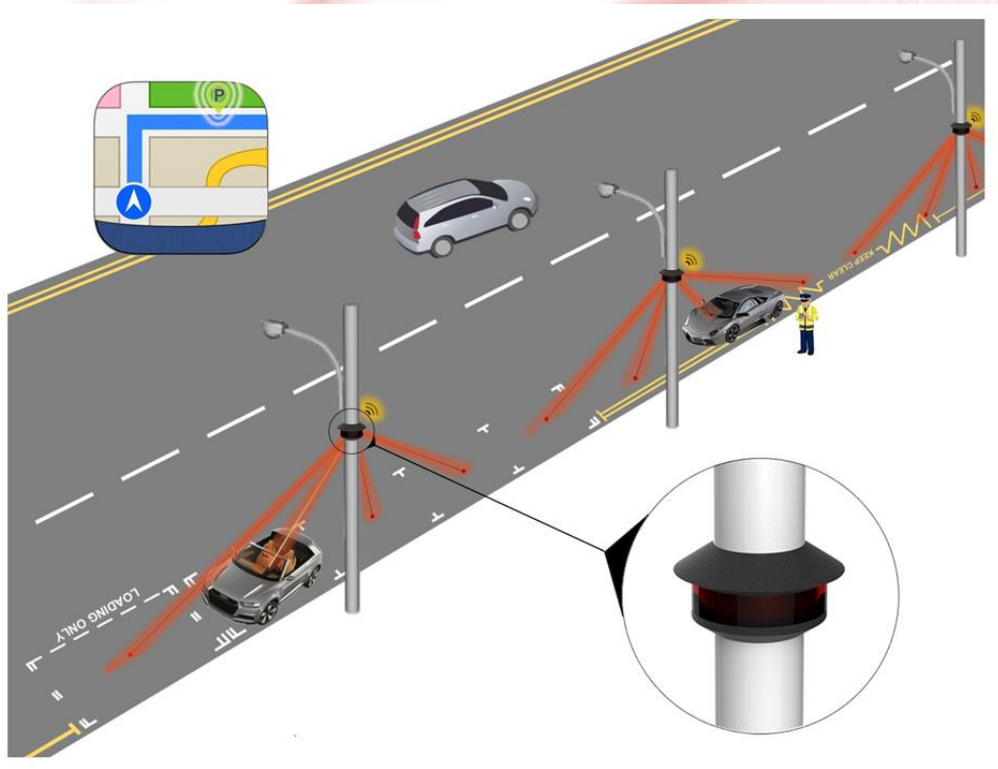# Gantry Crane Management System (GCMS)

PoV underway with 3 of 236 cranes at a single steel plant generating £100k.

➢ **Phase 1**: Productivity, material tracking & anti-collision of twelve 60m wide gantry cranes in a 1km long warehouse

➢ **Phase 2**: Integration of sensor produced data with enterprise applications (SAP)

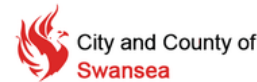➢ **Phase 3**: enable move to driverless cranes

Smart Infrastructure Pollution Monitoring

Vortex IoT led grant bid to be submitted end of March 2018 (£900k).

➤ **Aim**: Better monetize on-street parking and enable pollution monitoring at scale.

➤ **Outcome**: Pollution Control compliance* & new urban business model
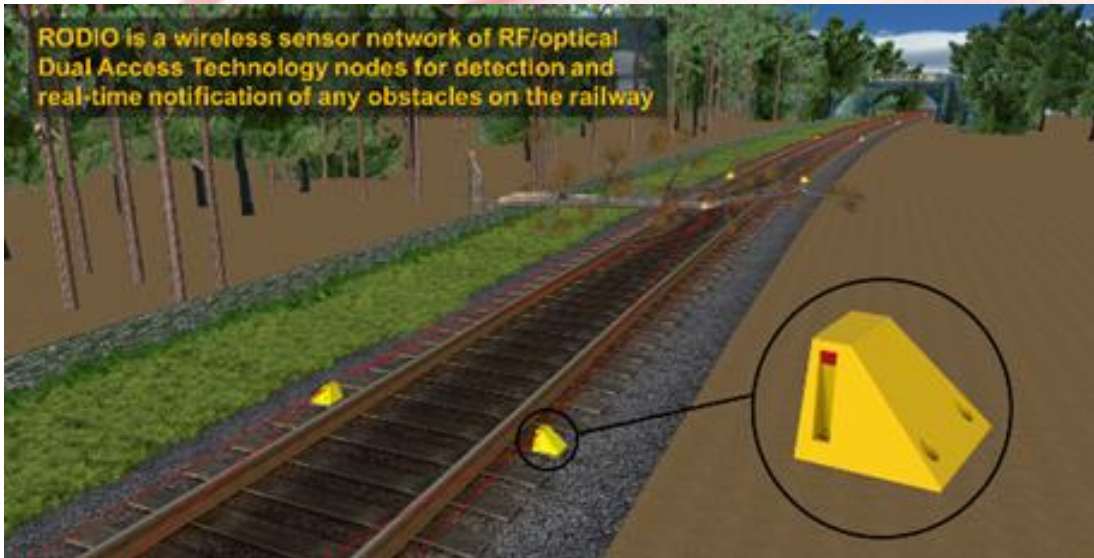
➤ **Consortium**

* Air Quality Standards 2010, Clean Air Act 1993, Environment Act (Air Quality Directions) 1995, UK Air Quality Plan 2017

Rail Infrastructure
Remote Condition Monitoring Solution

RODIO is a wireless sensor network of RF/optical Dual Access Technology nodes for detection and real-time notification of any obstacles on the railway

RODIO is a product we are developing **as part of a £580k** Innovate UK Vortex IoT led consortium project (started May 2018)

➢ Devices will be deployed across circa 5% of 20,000 miles of UK rail infrastructure (**approx. 32,000 sensors generating approx. £5m revenue in UK**)

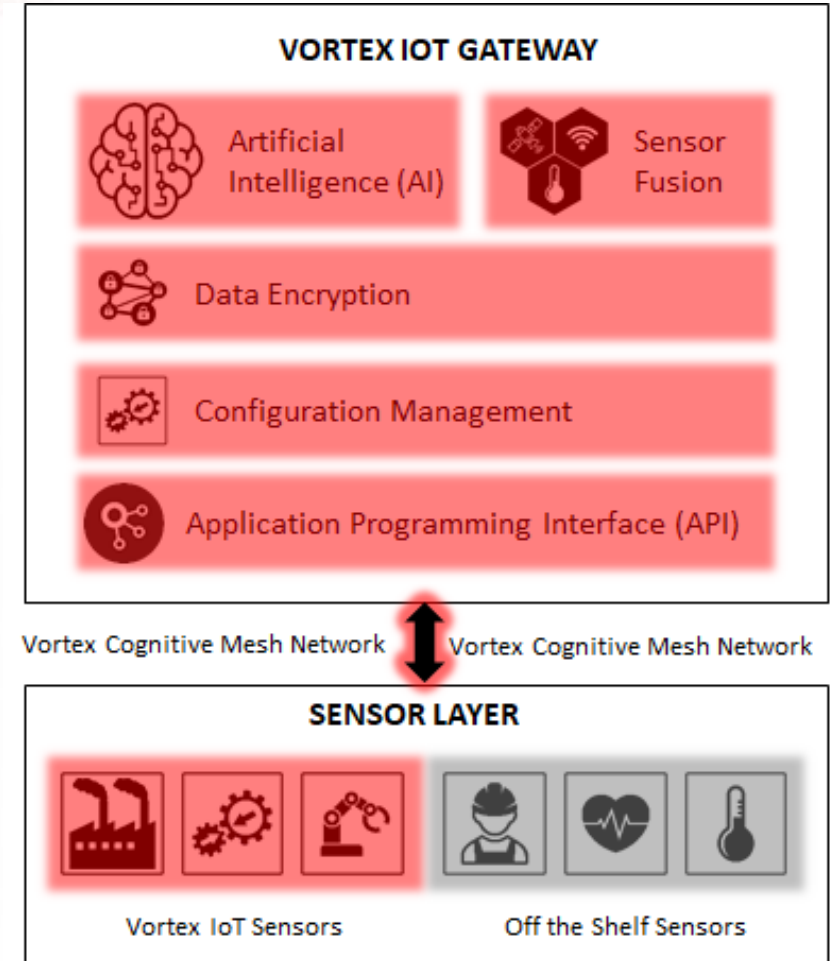➢ Changes in allocation of UK track costs

➢ Product has global reach

Why we are different:

➤ Ultra-low power consumption & energy harvesting

➤ Self-healing & self-organizing sensor network

➤ AI software and machine learning

➤ Cyber & sensor fusion tech for security & data integrity

➤ Readily tokenizable SaaS revenue models

Our IPR

VORTEX IOT GATEWAY

- Artificial Intelligence (AI)
- Sensor Fusion
- Data Encryption
- Configuration Management
- Application Programming Interface (API)

Vortex Cognitive Mesh Network ↕ Vortex Cognitive Mesh Network

SENSOR LAYER

Vortex IoT Sensors   Off the Shelf Sensors

VORTEX IOT

Independent IPR Statement

"ClearViewIP have concluded that Vortex IoT have generated a substantial amount of proprietary IP in their software and hardware designs. They have taken all reasonable measures to protect their IP through limiting disclosure and careful consideration of IP clauses in NDAs, contracts and funding arrangements with the support of external IP council.

Vortex's strategy moving forward is to consider formally registering their IP using patents, designs and trademarks in due course, to provide enhanced protection and develop a valuable IP estate."

Jon Calvert, CEO, ClearViewIP