

CREATING YOUR OWN DESTINY

Think smart. Act smart. Work smart. The Internet of Things (IoT) enables businesses to operate smartly and gives consumers the opportunity of leading really smart lives.



Pieter Pienaar, co-founder and managing director

The technology and expertise is available, and one company at the forefront leading the way in this sector is Informed Decisions, with offices in Johannesburg, Durban, Port Elizabeth, Cape Town and Nairobi, Kenya.

"We own our technology," says Pieter Pienaar, co-founder and managing director at the company. "In addition to our standard IoT technology, we design and built custom hardware to specification with our in-house hardware and software developers, and I think this is one of our biggest differentiators in the marketplace.

"We have developed our own private LoRa network," says Pienaar, "This consists of a complete end-to-end solution with sensor nodes, gateways and device management capabilities. All linked to a number of bespoke platforms to cater for our customer needs. We are completely independent of any public network provider and our solutions can be deployed in urban as well as rural areas. We have over 300 different sensors that we can integrate onto

our nodes and have made provision for any serial integration protocols, such as MODBUS, RS232, RS484, SPI, I2C, etc. as well as Programmable Logic Circuit (PLC) integration.

"Each layer of our technology provides "Edge Computing" capabilities as well as cross-network/Cloud computing. This allows for fast response times on critical events as well as managing the amount of data that is sent to the platform."

"Our solutions are cloud hosted on both Google and Microsoft Azure and is accessible via smartphones or web applications. In order to provide solutions to customers who have already invested in monitoring platforms, we offer complete 2-way communication integration to any system."

"The LoRa network allows for long distance (up to 20km radius, line of sight) communication and control capabilities and with 2-way communication, we can measure or control any sensor or device remotely."

"All the devices are managed by a "Device Management" layer which controls the firm-

ware, conducts health checks on all the devices as well as decrypts and cleans the data before it is sent to the relevant platform. We have 4 layers of security through-out the network and combined with the fact that the data never passes through a 3rd party system we probably have the best security available for an LPWAN solution."

Sectors where its IoT technology is currently being utilised effectively and making a difference include the beer industry, FMCG, the hospitality sector, the water preparation industry, within the farming community, pharmaceutical manufacturing, transport and also at residential properties. Its IoT sensors can assist in determining if equipment is operating efficiently, in monitoring utilities, regulating irrigation systems irrespective of whether it's on a farm or at home so the proper amount of water is given, to alerting you if maintenance is required on your equipment, to monitoring the quality of water delivered to households.

"We can create a system specific to your needs," says Pienaar, "irrespective of the industry."

The company has spent the past two years designing and refining its technology and is now ready to push its third generation IoT technology into the marketplace. In 2018, the company won the AB InBev Africa's 'Hack the World' technology category in Tanzania, for its farming technology, created to solve an issue the farming community.

"2019 will see exponential growth for the company because we can offer an end-to-end full value proposition for clients, as we create big data for our clients to dissect and digest in growing their own business. To my knowledge, we are one of only a few companies providing an end-to-end IoT in-house solution for customers," concludes Pienaar. ■