BRINGING THE POWER OF IoT TO AFRICA

IoT ultimately installs a network connecting buildings, businesses, individuals and technology. It brings the physical and virtual world together to create a smart environment. Cybernaptics is one of the few companies bringing real-world IoT applications to Mauritius. This is the next level of sharp business intelligence and smart management!

What IoT means for Africa

Sustainable development: Connecting households, businesses and entrepreneurs through eco-efficient and intelligent city panning.

Better quality of life: Using automation and alternative sources of energy to power greener, healthier living.

Citizen engagement: Creating an idea-sharing ecosystem that solves real-world problems with real-world results.

Economic opportunities: A network that businesses and start-ups can use to operate, innovate and contribute to the growing smart city infrastructure.

What is IoT?

The Internet of Things (IoT) describes everyday physical objects being connected to the Internet through different types of sensors and technology.

For instance, we have installed parking sensors across 200 parking bays to indicate whether a spot is occupied or not, and how long it is occupied for.

This data is streamed to a cloud-based platform that offers a visual map of the parking lot and shows movement over time. By bringing the physical and virtual world together, this data can be used for planning and research purposes.

AUTOMATION IN LOGISTICS

Challenge: Efficiency and accuracy are essential to productive factories and warehouses. Due to a lack of infrastructure, funds or experience, many still use manual intervention throughout their logistical processes which could end up costing them dearly in the long run.

Opportunity: Helping a factory remove manual stocktaking of filled cement bags across multiple distribution and production channels to remove human error and avoid internal theft.

Our IoT Solution: Cost-effective infrared sensors that count and classify each bag to make sure the inventory and distributions numbers match and to provide business intelligence reporting on productivity.

SMART AGRICULTURE

Challenge: One of the island's main agri-exports, sugarcane, is under threat from environmental, economic and workforce challenges that require a fresh approach to modernise and future-proof this legacy industry.

Opportunity: Advancing research into environment-resistant sugarcane strains by creating IoT-monitored greenhouses, eventually using this technology to enable smarter farming and resource management.

Our IoT Solution: Adding 24/7 monitoring of the intricate greenhouse processes needed for sugarcane crossbreeding, research and pollination.

ENERGY & UTILITIES MANAGEMENT

Challenge: Water and utilities management is a large, imported (and sometimes hidden) expense that affects households and businesses. Effective metering and monitoring are needed to use resources better, operate greener and manage costs.

Opportunity: Keeping a 250-villa estate's water supply running without using time-consuming and geographically challenging manual monitoring.

Our IoT Solution: Off-the-grid tank sensors that transmit live data to a digital dashboard to assist with the detection, monitoring and remediation of problems.