



## CRE8TEC

# Not Just a Better Mousetrap. Cre8tec Partners with Thinxtra to Provide an IoT-enabled Pest Surveillance and Control Solution

### About Cre8tec

Cre8tec is a Singapore-based web and app development company, providing customised, digital, IoT-enabled solutions that optimise business processes, increase customer engagement and disrupt traditional business models.

### The Opportunity

Create a technology-based solution for pest control service providers to improve the speed, efficiency and results of rodent management to minimise the spread of health risks and damage from rodent activity.

### The Partnership Solution

RATSENSE, an Internet of Things (IoT) enabled digital rodent surveillance system remotely monitors rodent activities and provides data to support targeted treatment that improves the speed and efficiency of pest control practices, protects property and reduces the use of chemicals.



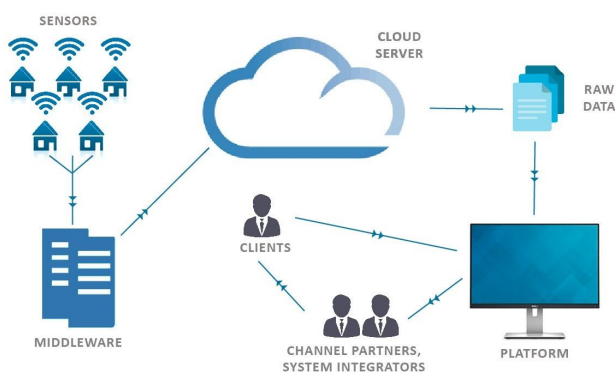
*In the last two years we've seen a global increase in rodent levels. Mice can produce up to twelve babies every three weeks and rats have adapted well to urban environments. Traps become less effective over time as rodents quickly learn to avoid them. Baits and other treatments, such as glue paper, are often inhumane. Detecting and treating rodent problems is an expensive, ongoing issue for many commercial and residential properties.*

**Deanne Baptista**  
Director of Cre8tec

Entrepreneur Deanne Baptista is passionate about solving a practical issue that doesn't get much discussion around the boardroom or dinner table: pest control. Like it or not, the pesky business of controlling rodent populations at commercial and residential buildings is an everyday problem.

It's also an important problem to solve. Rodents, such as rats and mice, carry more than 50 diseases which spread to humans through bites, contact with rodent urine, faeces or saliva and from the fleas, ticks and mites that live on rodents. Rodents also cause structural damage to properties by nest-building and gnawing building materials and can even create fire risk by chewing insulation on wiring. In rural settings, it's estimated rodents have damaged more than 1 percent of global cereal crops.

## HOW RATSENSE WORKS



## Integrated Digital Pest Detection, Management and Control

Recognising the challenges of treating rodent infestations efficiently and cost-effectively, the Cre8tec team designed the RATSENSE management system. RATSENSE is an IoT-enabled digital rodent surveillance system that lets pest managers, facility managers and building owners precisely track and record rodent movement and behaviours to enable targeted treatment. The RATSENSE system is supported by trained pest control service providers in Australia and New Zealand.

RATSENSE partners with the best. Service providers place infrared sensor-based tracking devices, running on long life batteries, around a property to monitor rodent activity in real-time. Data on rodent activity is captured and sent to a centralised base station, even through the most challenging environments, such as basements and cellars, via the Thinxtra OG Network, powered by Sigfox. The Thinxtra OG Network is the public, low-cost, low-power wide area network dedicated to connecting Internet of Things (IoT) devices over long distances.

The RATSENSE proprietary data management platform stores data on rodent activity in the cloud. The platform features algorithms that provide detailed reports, allowing pest control companies to take the right control actions. RATSENSE captures data 24x7, is configurable to provide alerts around rodent activity and helps pinpoint hot spots of rodent activity for fast, targeted treatment. Data trends allow for more predictive, rather than reactive control. RATSENSE includes an application programming interface (API) that allows for integration to most facilities and building management systems.

## Outcomes from Real-Time Digital Rodent Surveillance



*The RATSENSE digital surveillance system records rodent activity in real-time, taking the guesswork out of rodent management. We've deployed RATSENSE at multiple Grade A buildings, large infrastructure sites and universities in Singapore and Australia. We've proven the ability to reliably identify rodent activity for rapid treatment which delivers time and cost savings for customers and increases the efficiency of rodent management by pest control companies.*

**Deanne Baptista**

Director of Cre8tec

RATSENSE allows for estimates on rodent populations, where critters enter buildings, where they make nests and breed and the routes they use to get around. These fast, accurate insights allows for targeted treatment, reduced use of rodenticides and easy monitoring of pest management services.



*Adams Pest Control has been delivering innovative pest management solutions for over 70 years. We work with RATSENSE because the solution generates invaluable data insights which have revolutionised the speed and efficiency of our pest detection and treatments for customers. RATSENSE allowed us to make unproductive scheduled checks a thing of the past and enables for targeted treatments delivering significant improvements while reducing the use of baits, chemicals, power and other materials used in traditional pest management.*

**Peter Taylor**

General Manager, Adams Pest Control Pty Ltd

### About Cre8tec

Cre8tec is an IoT solution provider focussed on the environmental sector. For now, its offering is for rodents with RATSENSE.

For more information on IoT-enabled rodent management please visit the [RATSENSE website](#).

Customers experience time and cost savings because there is no need to manually inspect sites to check for infestations or monitor traps. Costs come down because treatment targets specific problem areas instead of covering an entire building, requiring fewer traps and baits. Customers have peace of mind their property is safe from rodent infestations.

There are more pests in the world than just rats and mice. Cre8tec is already working on how to leverage IoT solutions connected to the Thinxtra OG Network to track other pests, such as ants and cockroaches, and to capture environmental data points, like weather and temperature, to improve the system's predictive abilities.



*Cre8tec is always developing more ways to collect different types of data, which is part of how we continually add value to our customers. We're currently working on adapting our capabilities for other pests, including birds and termites,*

**Deanne Baptista**

Director of Cre8tec

### About Thinxtra

Thinxtra, The IoT Telco, accelerates business efficiency by connecting assets and making them work smarter. With our partners, Thinxtra delivers fit-for-purpose Internet of Things (IoT) device-to-cloud solutions in Australia, New Zealand, Hong Kong and Macau. Born in IoT, we are passionate about contributing to a profitable and sustainable future through large-scale next gen operational efficiencies. Our customers benefit from new business models, better customer experiences and higher asset utilisation. We know how IoT creates real business value and we know how to deliver it with local expertise and global reach.

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