

Rentokil Initial

The role of innovative technologies in mitigating risk within global food supply chains

Mark Reader

Group Category Director, Rentokil Initial



Rentokil Initial - Protecting People, Enhancing Lives



A **world class** services company with **global** presence in over **70 countries**



Industry **leading** **expertise** and **innovation**



Trusted to **protect** our customers



Work **closely** with **industry bodies** to **advance** pest control and hygiene services

The time is now

Food Supply Chain

World population to reach

8.1Bn

in next 10 years

About **one-third**

of all food produced in the world is lost or wasted post-harvest (FAO)

Foodborne pathogens result in

600m

cases of foodborne disease and around 500k deaths each year (WHO 2015)

Pest Threats

Internet of Things



The time is now

Food Supply Chain

We can expect a potential increase in fly populations of

244% by **2080**

Business spend on average over

\$9000

per year dealing with fly problems

Approximately

22%

of facilities across the food chain globally have some record of pest activity at any one time.

Pest Threats

Internet of Things



The time is now

Food Supply Chain

Pest Threats

Internet of Things

20.4 billion

connected 'things' will be in use by 2020 (Gartner)

By 2025

expectations are that around 75 billion devices will be connected

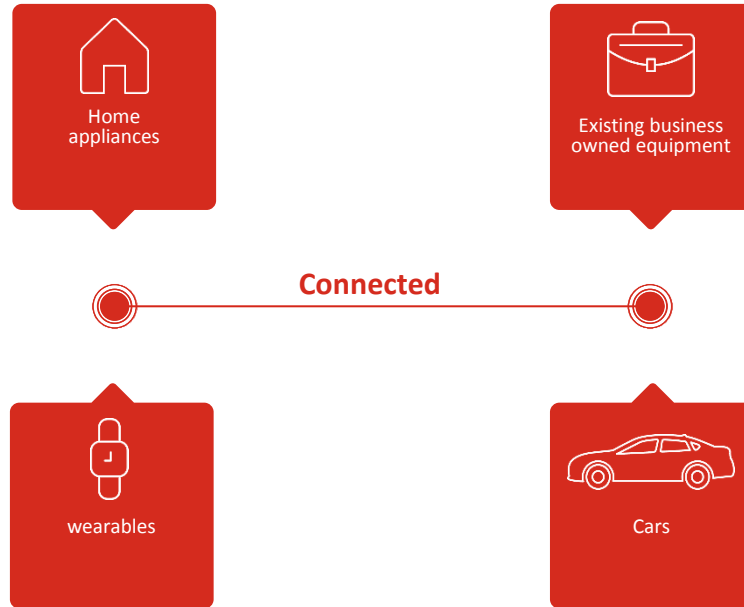
Less than

30%

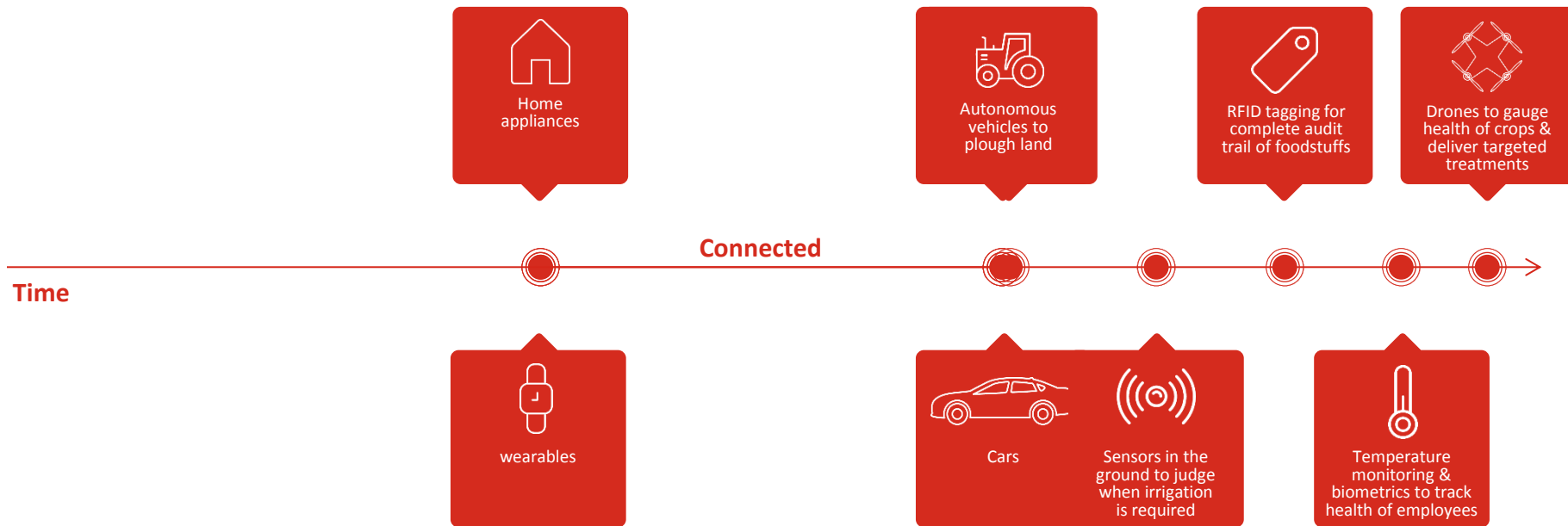
respondents surveyed in Food Supply Chain have a strong theoretical or working knowledge of IoT



The Internet of Things



The Internet of Things





People

Insight

Innovation

Technical Capability and Operational Leverage

Sales, Service &
Technical Capability

Online training to progress
our collective expertise

Delivering Innovation
to the front line

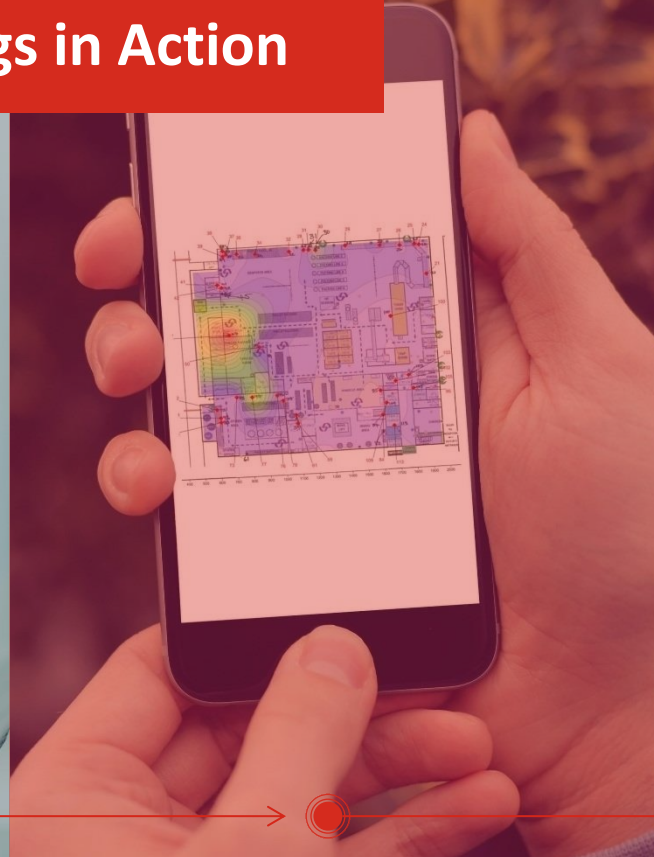
Delivered through our cloud-
technology platform



The Internet of Things in Action



Connected devices



Data Recording & Risk Mapping



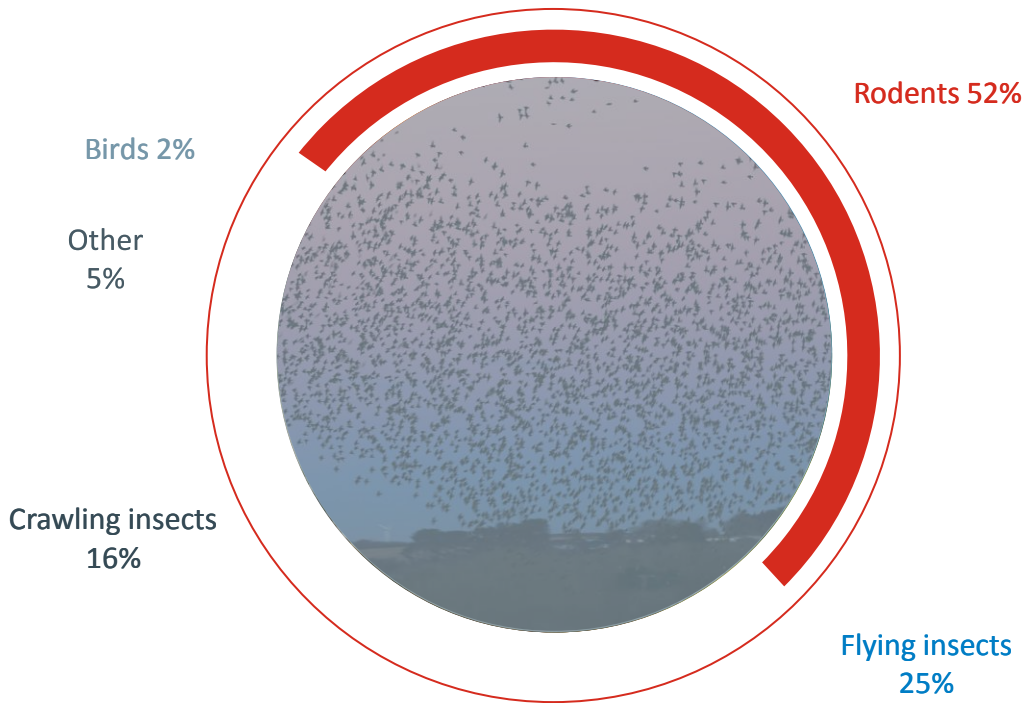
Continuous Improvement

Global pest risk activity

Approximately

22%

of facilities across the food chain globally have some record of pest activity at any one time.



Frequency analysis of recorded recommendations

Conclusion

Key interventions in prerequisite hygiene, sanitation, and pest management practices can be linked to continuous improvements in food safety.

Based upon > 200,000 recommendations

50,000 premises across 27 countries

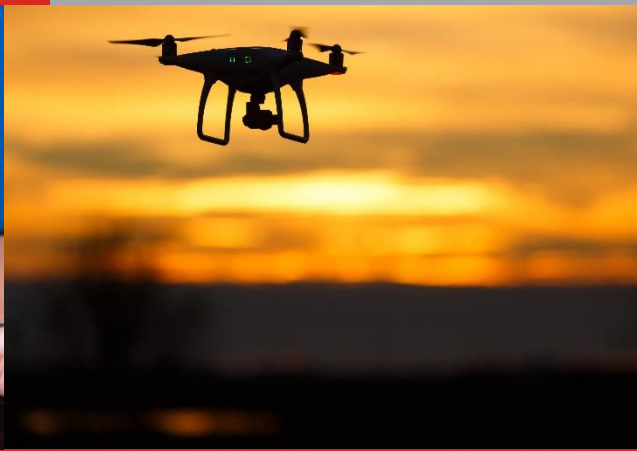


The future of surveys

We are already working on the future



Automated record keeping



Supported by technology



Responding where needed

The future is about data ...

... to help develop control and exclusion programmes, without relying on toxicants.

Removing bait boxes & insect detectors - faster detection & more data sources

Biogenetic identification - faster response with more data

Smart Surfaces – Auto detection and dosing

The future of detection



Summary

People

Tools to leverage paperless systems, to engage, develop and certify those involved in the food supply chain

Insight

Using the insight we derive from data to support paperless techniques such as predictive modelling to mitigate food safety risks

Innovation

Innovation that produces data

Rentokil Initial

Thank you!

