

# fastcomm

— Linking people places things —

## **The Connected Kitchen**

A recipe for success for all in the restaurant and food service

Digital transformation is an ever-ongoing development process and in the last decade the internet, or more so, the Internet of Things has been recognized for its empowering role to change economic and social systems. IoT has since then continued to spread and is nowadays considered to be one of the most disruptive technologies in modern history.

The term “Smart Remote Monitoring” has become ubiquitous when we think of IoT, and a lot has been said about having the ability to utilise internet-connected and remotely controlled equipment in commercial facilities such as restaurants. In fact, experts predict that smart kitchens will become a \$10 billion industry. For some, improved nutrition is the primary appeal of smart kitchens. Smart kitchens keep track of food ingredients and suggest specific food to improve each unique user’s health. Add in the fact that smart kitchens will automatically shut off heat after use to prevent fires and this is just one of the many reasons why people, more so restaurateurs, are excited about this technology.

With the infrastructure in place to provide energy control and analytics in a restaurant, it’s clear that there is an increasing number of benefits of having a “smart” connected kitchen, especially when it comes to operating costs, equipment performance, and product quality. IoT’s Remote Monitoring Solution has become the new forward thinking and innovative sous chef of the digital kitchen world.

### *IoT in Commercial Kitchens*

With the foodservice industry growing rapidly, many restaurants are struggling to keep up with the need to constantly monitor and ensure effective kitchen operations. More importantly, restaurant operators need a solution that can help prevent food contamination and food spoilage before it happens.

According to the World Health Organization (WHO):

***“An estimated 600 million – almost 1 in 10 people in the world – fall ill after eating contaminated food.”***

For this reason, food monitoring needs to be more affective. IoT could be the solution to these problems in many ways since it allows for the consistent and constant monitoring of equipment and food.

### *IoT in food production line*

An IoT system provides real-time information about the status of the equipment and sends automated alerts once a problem arises. When there is an issue i.e. if there is a temperature spike or too much moisture, it can be detected and resolved fast as alerts are instantly communicated to operators. It can also track equipment sanitation, maintenance and repair records and create records for audits.

### *IoT in restaurants*

Cold storage and cooking temperature are of major importance when it comes to food safety. Bacteria grow rapidly between 5C to 63C. Therefore, food service operators should ensure that their food is not preserved within this range. Using an IoT remote monitoring solution can help managers know when their freezers, fridges and food warmers are working properly.

## **How IoT can Mitigate Kitchen Disasters**

A connected kitchen can automate and standardize many restaurant processes and provide greater visibility into restaurant operations, especially when it comes to the condition and status of kitchen equipment and food quality.

IoT in a connected kitchen can:

- Issue alerts when temperature changes can affect product quality
- Anticipate equipment failures and schedule maintenance as needed
- Increase customer satisfaction through more personalized digital services
- Data collection on devices to help management improve efficiency

In a connected kitchen, sensors are attached to two main types of equipment, namely the heating and refrigeration units. These sensors then gather data and during regular intervals, upload that data to a cloud-based platform, where restaurant operators can remotely access the status of all the equipment in the kitchen at any time.

As a result, operators can be alerted if any equipment is faulty. Furthermore, real-time monitoring of all the connected equipment in the kitchen helps restaurant operators with energy-saving best practices in order to cut costs.

## **A New Way of Thinking**

Whether a part of a franchise or an independent restaurant, automated monitoring solutions can help you and your staff maintain a successful and profitable business.

Fastcomm offers an alternative to the time-consuming, paper-based manual processes when it comes to effectively monitoring and managing kitchen appliances and equipment. Fastcomm's Remote Monitoring solution is intuitive, reliable, and cost-effective. Appliances and equipment can be tracked from anywhere, at any time, which frees up manpower and time, allowing employees to focus on more important job responsibilities. In addition, utilising a remote monitoring solution improve the opportunities for real-time control for food businesses of all sizes.

The Fastcomm solution consists of wireless sensors, gateways and monitoring software, to offer a complete remote monitoring solution for restaurants of any size. Wireless sensors can be used to monitor various environmental aspects of a restaurant as well as integrate with existing equipment (such as coolers and appliances) to provide real-time data.

The Fastcomm wireless gateway acts as a communication bridge between the wireless sensors and Fastcomm's cloud based remote monitoring platform known as **Hellothing**.

Through the Hellothing platform you can view sensor information from anywhere, at any time via a computer, tablet or smart phone. The platform can also alert you immediately by email and/or text message if conditions that you set are met or exceeded. The wireless sensor network (WSN) can be expandable from a single local area to a multi-site network with sensors anywhere in the world. The gateway will then transmit the data to the Hellothing platform which allows you to configure, monitor, and manage all your locations, and invariably all your equipment, from one network.

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## The Fastcomm Advantage

Fastcomm's business is to build technology platforms that empower its clients to digitally transform their businesses and therefore to understand and address the growing needs of their customers. Our mission is to build long-term technology partnerships that help transform companies, allowing them to concentrate on their core business.

We have a proven track record of understanding disruptive technologies and the effect that they have on businesses. We have built platforms in the IoT and OTT technology domains that allow us to connect people, places and things successfully.

The Fastcomm group of companies have been providing solutions to its partners, since 2002. We have offices in the USA, Europe and South Africa, allowing us to produce innovative solutions, utilizing know-how and skills acquired worldwide. Our skilled engineering teams have, over many years, created platforms and building blocks that allow for rapid development and deployment of solutions.

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## References

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