



VANTIQ

Case Study

“Vantiq is the key to this Coronavirus prevention system. Without Vantiq, this solution would not exist.”

Aaron Guo | General Manager

Quick Facts

- ▶ Built real-time Coronavirus tracking system in less than 2 weeks
- ▶ Used by retail and business environments such as a piano store and manufacturing plant
- ▶ Reduced risk of infection through IoT sensors and cameras

Check out more
Vantiq Case Studies at

www.vantiq.com/case-studies/



巨联科技 (广州) 有限公司

GiConnect Technologies (Guangzhou) Co.Ltd

With Vantiq, GiConnect was able to build a real-time Coronavirus tracking system by integrating thermal cameras, location sensors, wearable devices, and more. This system will evolve into a fully functional smart building application to increase the safety and security of buildings and their occupants.

THE CHALLENGE

The COVID-19 outbreak has affected the world in many ways. This pandemic has led to the closure of stores, mass unemployment, a financial crisis, and many deaths. If rapid preventative measures would have been taken from the very beginning the fallout could have been mitigated and many lives saved. Today, hospitals are experiencing a lack of manpower, medical supplies, and an influx of COVID-19 patients that have overwhelmed the medical system across the globe.

Driven by social responsibility and customer demand, GiConnect set out to build a Coronavirus prevention system to provide early warning for people who do not know they are infected. GiConnect, a division of Winwin Soft, focuses on IoT, artificial intelligence, and

enterprise information construction services.

Building an innovative next-generation system is not easy. Not only was the development window very tight, but the complexity and high failure rate of building a real-time system was a major concern for GiConnect.

THE SOLUTION

To address these concerns, GiConnect chose to develop on **Vantiq's real-time event-driven platform**. This allowed them to build their system with the following characteristics:



Distributed Architecture Increases Agility

To bring as many different technologies together and allow real-time action to be taken, developing on a distributed architecture was key to the project's success. This system brings together facial recognition, thermal cameras, location sensors, wearable devices, and more to provide the clearest and most up to date real-time information on the spread of Coronavirus. This entire application runs on the edge and does not require a cloud; this has major benefits when it comes to privacy as data that does not need actions to be taken is discarded.

Vantiq's distributed architecture allows for rapid updates and additions to be made to GiConnect's system. When a new technology is implemented, or an update is made the entire system does not need to be taken offline. This is absolutely critical when having any downtime could mean the infection of many more people.



Low-Code Development Tools

Before the COVID-19 outbreak, there was no such solution in development. Vantiq uses a low-code development approach to abstract away vast amounts of code; this allowed for GiConnect's system to be built from the ground up in less than 2 weeks. A low code approach also makes updating the system extremely fast. Instead of going back through thousands of lines of spaghetti code, a simple drag and drop interface makes evolving real-time systems a breeze.

Being able to develop and evolve applications quickly was key for GiConnect. When the Coronavirus is under control, GiConnect plans to adapt their application into a general smart building application. Without low-code development tools this transition would be a long and arduous process.



Integrated Collaboration Tools

Machines and intelligent systems will bear the brunt of the work, but humans still need to be brought in to make mission-critical decisions (especially when human life is on the line). To address this need Vantiq uses "Collaborations" to notify operations personnel when human intervention is needed.

GiConnect is using the Vantiq Collaboration tool to alert building staff and medical personnel when a potential Coronavirus infection is spotted. By only acting when necessary and not needing a human to monitor the application 100% of the time, GiConnect is able to save their customers both time and money.



“With Vantiq we were able to develop a total solution in less than two weeks.”

Aaron Guo | General Manager

THE RESULT

Reduce the transmission of the Coronavirus

Monitoring the spread of disease in real time has an enormous impact on transmission rates. With the extremely high infectivity rate of COVID-19 one infected person going unnoticed could mean the infection of many others. By developing this application, GiConnect was able to slow the spread of the virus and retain the trust of their customers.

Shortened development cycle

There was absolutely no time to waste when developing this application. Because GiConnect chose to develop on Vantiq, they were able to build their solution in a fraction of the time it would normally take. In less than two weeks they had a working application that is ready to be deployed in the field.

Able to evolve application as needs change

As we continue to get a hold on the Coronavirus as a society it will become less important for applications like GiConnect's to be used day-to-day. As a result of developing on Vantiq, GiConnect is able to evolve their application to fit the needs of their customers. By making this into a generalizable smart building application GiConnect will still be able to sell their solution and serve their customers.



VANTIQ

Built on a modern reactive architecture, Vantiq is an agile development platform to build scalable, distributed, real-time applications. Founded in 2015 by Silicon Valley legends, Vantiq provides maximum agility for businesses to drive operational innovation and accelerate real-time business awareness. Learn More at www.vantiq.com
