

BECHTLE SCALES IoT WITH AXINO FOR HEALTHCARE INDUSTRY

HOW PRECISION CORE TEMPERATURE READINGS SUPPORT THE MEDICAL INDUSTRY

Bechtle is largest IT Company in Germany and has a strong market share within the retail and healthcare industry. Recently, to expand on their IT offering, Bechtle has opened an Internet of Things (IoT) branch, which aims to further the connection of IT to a complete fully spectrum service offering.

Stefan Schweiger, Head of IoT & AI Solutions at Bechtle Switzerland headed up the expansion into IoT at Bechtle, and took an approach to incorporate solutions that add value to the Bechtle Control Suite platform.

"We aim to extent our connections of IT with IoT by bringing in clever technologies that are scalable and support our expansion into IoT solutions" says Schweiger. "Axino fit that description perfectly, with precise sensors and algorithms that monitor core temperature."

Bechtle has a strong holding in the retail market and was early to pilot the Axino solution within food retail settings. Retail is a clear vertical in which measuring core temperature is directly related to the quality and freshness of food. But often overlooked is the opportunity for healthcare providers to integrate smart technologies for the quality of medication and medical devices.

Highlights

- Scaling to Healthcare industry
- Core Temperature data for medication & medical instrumentation
- Customizable alarming engine for business processes in health care
- Integration with Bechtle IoT platform suite

Benefits

- Saving ±16,000 hours per year per facility in manual temperature readings
- Reduction of losses for medicine & medical devices
- Precision core temperature reading for certification compliance
- Automated reporting for auditing

"We chose Axino not only for their capability to scale, but for the precision of the data."

Stefan Schweiger,
Head of IoT & AI Solutions, Bechtle Switzerland

BECHTLE

Challenges in Healthcare

"Medication and medical instruments often need to be stored at cool temperatures and must meet strict certifications in order to be prescribed to patients."

Everywhere medication and medical instrumentation is stored in refrigerators, the temperature must maintain a certain threshold. This is consistently monitored and audited by a regulatory body to ensure quality control. Normally, temperature loggers are placed into a refrigerator and measures the air temperature.

"Three times a day, nurses will have to stop patient care to manually write down the temperature readings of each of these loggers and will bring the measurements to the administrators. Administrators will then input these data values into an excel sheet and prepare for an audit," explains Schweiger. *"It's a manual system, which needs modernizing, for healthcare staff and patients."*

Manually importing temperature readings into spreadsheets require a level of administrative interpretation and is prone to human error. This can pose a threat to operational efficiencies and decreases the confidence that the corrective response is being conducted to salvage the mistake.

Without alarming, if a refrigerator door is left open in-between data measurements, it won't be discovered until the following data measurement is taken. This causes a problem for storing the medicine and may impact its quality and viability.

ABOUT BECHTLE

Bechtle is listed in the MDAX and TecDAX indexes. In 2021, its revenue amounted to €5.31 billion. For more information, see [bechtle.com](https://www.bechtle.com).

ABOUT AXINO

Axino combines IoT sensor technology with patented AI algorithms to ensure freshness while reducing energy consumption. By digitizing and automating quality management process, we take the guess work out of food safety (HACCP) compliance. Learn more at www.axino.ai

Precision Data

Axino sensors offer precise data, measuring temperature within a tolerance of $\pm 0.3^{\circ}\text{C}$ which is compliant with the strict certification required for monitoring medication or medical devices.

By integrating the Axino data into Bechtle systems, the temperature data is immediately made available for administrators and IT departments. Setting temperature thresholds for alarming ensures that measures can be taken to prevent losses due to temperature fluctuations.

Quality assurance requires automated reporting of the temperature data for frequent audits.

An Out-of-the-Box Solution

With the Axino plug & play approach, Bechtle has taken the hassle of IoT out of the hands of IT managers. Simple integration of multiple sensors which support this approach, enable a robust solution.

"We currently offer Axino Core Temperature sensors for both medical use, and for food quality and freshness, but we're also expanding our IoT suite to include air quality CO2 sensors and smell sensors. This allows us to make a complete solution for our customers, adding value to their entire operations."

Future plans for expansion with Axino are to incorporate life-saving blood temperature data, a solution that could result in a reduction of up to 30% of wasted blood donations.

"Temperature monitoring itself is a huge use case where you can easily show the benefit of IoT. Because it's a highly regulated, manual process, even if you do it right, there is always losses from waste and time!"