

# LITHIUM-ION BATTERY MANUFACTURER EMBARKS ON DIGITAL TRANSFORMATION

---

CASE STUDY

# BACKGROUND

A leading lithium power solutions manufacturer in the United States embarked on a journey to transform their business and provide clients with superior service by connecting their products.

The OEM provides battery solutions for mobility, material handling, and data centres.

To achieve transformation, they had to connect their products to the IoT cloud to collect real-time data and continuously monitor performance to add to their products' services.

## CHALLENGE

The battery manufacturer faced challenges navigating different connectivity technologies to connect their power solutions securely.

## SOLUTION

Altiux was selected to design a connectivity solution to extract information from the battery management systems and securely transmit it to a cloud application. The project was handled in a consultative manner beginning with an understanding of the customer's business needs, timelines, and budget.

Research was conducted on various operating systems, hardware, and software options to determine the optimal combination. The core aspect of this exercise was to allow the hardware to last long and facilitate software updates.

The delivered product included advanced wireless connectivity options and the device's configuration using GUI to enhance the user experience.

The solution features battery data collection through a connectivity gateway, wireless communication to the cloud, and integration with one of the top three cloud IoT platforms.

This solution also enabled the BMS (Battery Management System) to be updated over the air with firmware updates.

## CONCLUSION

By partnering with Altiux, the manufacturer was able to achieve its bold vision of connecting power solutions to the internet quickly.

Based on Altiux's decades of experience, the OEM was able to select flexible and modular off-the-shelf software components that support a wide range of management capabilities out of the box.

As a result, the project was completed without reinventing the wheel, thus reducing risk and cost, and allowing engineers to focus their efforts on customisations that were unique to the product.

# WE HELP ACCELERATE YOUR IOT!



Altiux Innovations is a software & product engineering services organization focused on helping you accelerate development of your IoT solutions and products. We provide specialized engineering services across the entire IoT development cycle from consulting, device engineering, cloud and mobility application development, data analytics, and support & maintenance.

Altiux has developed an IoT Toolkit - BoxPwr™. BoxPwr is a production ready suite of software frameworks for sensor nodes & actuators, communication gateways, Edge computing & Cloud connectivity that helps accelerate IoT product & solution development.

At Altiux, we offer multiple models for commercial engagement that can be tailored to meet your specific needs.

---

### United States

Altiux Innovations Inc,  
1551 McCarthy Blvd, Suite 117,  
Milpitas, CA 95035, United States

info\_usa@altiux.com  
+1 650 282 5757

### Corporate Office

Altiux Innovations Private Limited,  
Salarpuria Touchstone, No. 133/1-3, First Floor, A Block,  
Kadubeesanahalli, Outer Ring Road, Bangalore - 560103, India.

info@altiux.com  
+91 80 67204444