



A Case for the Cloud: BluWave-ai

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What was the business problem?

As we become more aware of the impact humanity's energy use has on the environment, we strive for cleaner forms of energy production, like wind and solar generation. This energy transition presents two challenges.

- The first is that the modern smart energy grid generates large and continuous amounts of data, too much for a human operator to process and make meaningful decisions on in a timely manner. This includes data from renewable energy production, individual customer electrical demand, as well as energy market conditions. All of this data needs to be analyzed and acted upon quickly to maintain efficiency for the smart energy grid.
- The second is that renewable energy production is highly variable, further increasing the complexity of being able to meet the demands of the energy grid while managing the energy production load. Unless we resolve these challenges, the adoption of renewable energy sources will be limited.

How does your product solve this problem?

BluWave-ai's grid energy optimization platform aggregates a myriad of device and sensor data, including historical customer demand and weather forecasts, and processes the data for use in our artificial intelligence (AI) models. Using the data, the AI models generate insights and quickly make decisions, which are relayed to the smart grid infrastructure. The smart grid then optimally allocates energy for use in the grid, to smart homes, electric vehicles, and battery energy storage technologies. The outcome is maximized use of renewables and reduced energy waste of all forms.

¹<https://lefronic.com/cloud-computing-statistics/>

Cloud Clip:

70% of CFOs claimed that cloud computing had a groundbreaking impact on their business.¹

What technical resources did you need?

When developing our prototype, we needed cloud infrastructure that was cost effective and easy to use. We also needed in-depth technical resources to begin using the platform quickly, since we could only allocate so many work hours to the working and running of our cloud infrastructure while we developed our product.

Why did you choose the DAIR Cloud?

We chose DAIR because it provided everything we needed in a cloud infrastructure, without incurring the costs of installing our own hardware, having to pay for public cloud, or having to learn a complex platform. As a start-up, careful allocation of funds is critical to success and using the DAIR Cloud allowed us to direct more funds into product development instead of worrying about cloud infrastructure.



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The DAIR Cloud provides entrepreneurs with free, high-performance cloud resources for product development, testing and demonstration.

How did DAIR help your business?

With DAIR, we quickly established our cloud infrastructure and moved directly into product development and demos of our prototype. We leveraged the GPU that DAIR offered to power our AI development, something that would not have been economical for a startup in a commercial environment. Outside of that, DAIR has helped expand our network of professionals. We've connected to numerous other entrepreneurs, events, meetups, and government agencies through the DAIR community. Knowing that knowledgeable support is only a phone call or a few clicks away has been a great boost to our development.

What was the result?

We now have customers on three continents and continue to expand our client base of utilities, micro-grid operators and electric vehicle fleets. As society increasingly moves toward large-scale, eco-friendly alternatives, such as electric cars, transport trucks, and buses, we believe our energy prediction and optimization platform will play a key role in the increased adoption and expansion of renewable energy in electrical grids.



Accessing DAIR is simple.

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