Meet the Startup: Maplewell Journey at Intel® Liftoff Days

Best Practices

1) No empty line between paragraphs.
2) Include an empty line between the text and the next heading, and between the heading and the following text.
3) Italicize the quotes, add the quote owner, company name, position
4) Each article should include quotes from startups: testimonials, insights, comments.
5) Use proper names and links to Intel's products, for example, Intel® Tiber™ Developer Cloud (https://www.intel.com/content/www/us/en/developer/tools/devcloud/services.html). Here is an example with more products: https://community.intel.com/t5/Blogs/Tech-Innovation/Artificial-Intelligence-AI/How-Enterprises-and-Developers-are-Powering-AI-Solutions-using/post/1594246?source=MessageSyndication

Recommended structure for a success story:
- About the startup
- The Challenge
- Building the Solution and Intel's contribution
(add a quote and visuals)
- Conclusion

[Article Subject]

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[Article Teaser]

Discover how innovative participants like Maplewell Energy advanced their solutions, uncovered new potential and set the stage for significant industry impact at the recent Intel Liftoff Days Hackathon.

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SEO Title	Find out how Maplewell Energy Advanced Their Solutions at Intel® Liftoff Days
SEO Description	Explore how Maplewell Energy leveraged the Intel® Liftoff Days Hackathon to advance their solutions and unlock new capabilities.

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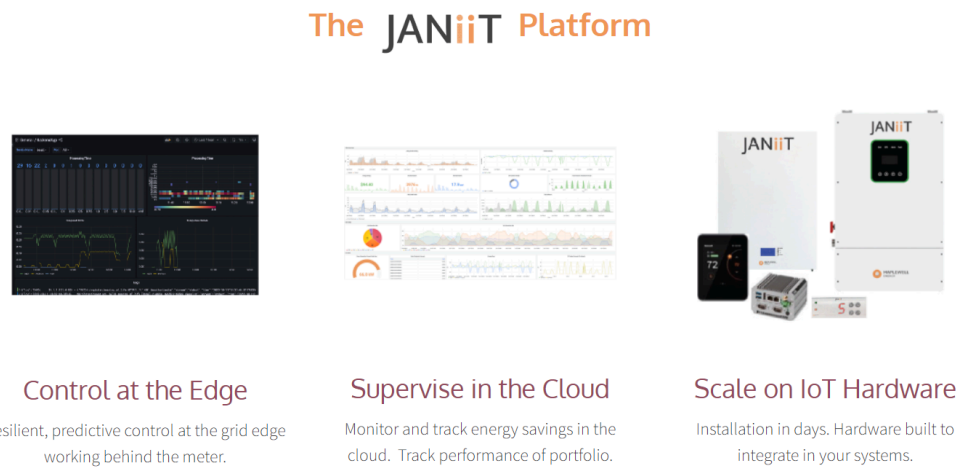
The recent Intel® Liftoff Days hackathon brought together some of the most innovative startups from around the world, all focused on using cutting-edge technology to create impactful solutions.

With a theme centered on multi-modal AI and quantization, this year's event encouraged participants to harness the power of Intel's cloud resources and AI technologies to process various types of data within a single model. The results were nothing short of groundbreaking, as each startup pushed the boundaries of what's possible in AI-driven innovation.

Among the standout participants were Maplewell Energy, who seized the opportunity to evolve their solution and unlock new capabilities. Their journey through the hackathon not only demonstrated their technical expertise but also opened the door to fresh possibilities for scaling their product and making a meaningful impact in their industry.

At the Liftoff Days hackathon, Maplewell Energy took their expertise in energy optimization to

the next level with their JANiiT Energy Management System. Tasked with creating a small language model (LLM) capable of estimating physical systems data using vector quantization, their project addressed the challenge of large-scale optimization and maintaining battery system health, both critical components in the energy sector.



Leveraging Intel's cloud infrastructure, they explored advanced optimization techniques, data compression, and state estimation to enhance their system's performance.

What did they present on pitch day?

Led by CEO and Co-founder Matthew Irvin, on pitch day they presented their cutting-edge predictive control system designed to optimize energy demand. As electrification grows, driven by EVs, fast charging, and industrial demand, their JANiiT Energy Management System provides crucial solutions for managing the strain on utility grids. By leveraging AI-driven optimization engines and predictive control software, Janet enables peak shaving within distributed battery storage, dispatching batteries to offset energy peaks and reduce demand charges.

Feedback from mentors like Bob Chesebrough and Desmond Grealy helped refine their approach, especially around data compression, scalability, and exploring global models for enhanced state estimation. These insights are shaping Maplewell's next steps in revolutionizing energy demand management for commercial and industrial facilities.

What did they achieve during Intel® Liftoff Days?

Maplewell was able to refine their use of LLMs for data estimation, seeing performance gains despite some accuracy trade-offs. The hackathon helped them address scalability and efficiency issues while exploring new industry applications, such as maritime and aircraft battery management.

It's safe to say they are better equipped to optimize energy demand management for commercial and industrial buildings, with a clearer path toward scaling and refining their solution, thanks to the input received at Liftoff Days.