

Q&A: Bringing AI to the Grid with Buzz Solutions CEO Kaitlyn Albertoli

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Researchers from the Data Catalyst Institute spoke with Kaitlyn Albertoli, CEO and co-founder of [Buzz Solutions](#), about how her team is changing the way utility companies inspect and maintain their infrastructure. Founded by Albertoli and Vikhyat Chaudhry, Buzz Solutions uses advanced computer vision and machine learning to deliver fast, more precise grid inspections—cutting costs, boosting reliability, and helping prevent catastrophic failures. With a mission to modernize grid operations, Buzz is equipping the energy sector with smarter, more resilient tools to address climate risks and aging infrastructure.

Data Catalyst Institute: Buzz Solutions has seen rapid growth, doubling revenue, and signing new partnerships across the U.S. and Caribbean. What's driving this momentum, and how has the demand for AI-powered grid solutions evolved?

Kaitlyn Albertoli: The momentum behind Buzz Solutions is rooted in the urgent challenges facing our energy system and a growing recognition that modern, data-driven tools are essential to solving them.

Driven by rising concerns around extreme weather across the U.S. and Caribbean, utilities are collecting more inspection data than ever before through helicopters, drones, and other sensors.

At the same time, skyrocketing energy demand — fueled by electrification, population growth, and economic development — is straining an aging grid system. Utilities recognize they can't build their way out of the transmission and distribution gap and meet the rising demand, so they must urgently upgrade and better manage the assets they already have in service.



CEO and Co-founder, Kaitlyn Albertoli

That is where we come in. Buzz Solutions directly addresses these issues. Our AI-powered platform helps utilities turn the overwhelming volume of inspection data into actionable insights by rapidly identifying component anomalies, wildfire ignition risks, and potential points of failure. This not only improves operational reliability but also strengthens grid resilience, reliability, and safeguards communities from service disruptions and costly disasters.

What's driving our growth is the alignment between these critical infrastructure challenges and the clear, immediate benefits of data-driven, preventive asset management. The demand for AI-powered grid solutions has evolved from being a nice-to-have innovation to a must-have capability for utilities tasked with keeping the lights on, protecting public safety, and meeting rising demand without delay.

DCI: How do you stay ahead in the competitive landscape of energy-sector AI startups?

KA: We focus on solving a very specific and high-impact problem: how utilities inspect and monitor their grid infrastructure more efficiently and proactively. Our platform is designed specifically for electric utilities, which means it integrates with their longstanding operations workflow and supports their existing systems. We are not building generic AI algorithms or a generalized platform. Rather, we are building tools that are deeply aligned with utility asset management workflows and regulatory needs.

Our competitive advantages come from the quality of our data and the accuracy of our models. We have over a decade's worth of utility inspection data and a robust human-in-the-loop learning process that continually improves our AI through subject matter expert feedback. That results in greater precision and more actionable insights for our customers. We also made the strategic decision to be hardware-agnostic. Utilities can work with any drone or camera provider they choose, and still benefit from our analytics. That flexibility, combined with our focus on utility-specific outcomes, has been key to staying ahead in a fast-moving space.

DCI: Buzz Solutions is working with major utilities like NYPA, Dominion Energy, and others. What are you learning from these diverse deployments, and how are they shaping the future of proactive grid management?

KA: These partnerships have given us the opportunity to build solutions that are adaptable to different regions, climates, and grid architectures. For example, with Dominion Energy, we used our AI to quickly analyze tens of thousands of transmission assets in just a few hours. That project helped demonstrate how much more efficient and targeted maintenance planning can become when the right data is available in the right format.

Our work with NYPA gave us insight into how important it is for inspection results to connect directly to geographic and asset management systems. That feedback led us to launch PowerAI 2.0, which organizes inspection data by structure and integrates directly with software platforms businesses, governments, and utilities use to map and analyze geographic information. Our experience with DRIFT showed us how our software can assist drone service providers that offer end-to-end inspection services.

These real-world deployments have shaped our platform roadmap. They have helped us prioritize speed, accuracy, and usability, and continue to guide how we support utilities in moving from reactive to predictive infrastructure management.

DCI: With summer wildfire season underway, how urgently are utilities adopting AI-powered inspection tools and is Buzz seeing faster deployment requests?

KA: The urgency is increasing every year. Wildfires are no longer viewed as isolated or seasonal issues. Utilities are being held accountable for infrastructure-related ignition risks, and the pressure to act is growing. We are seeing more utilities move from planning phases into implementation of wildfire risk mitigation programs, and many of them are accelerating their timelines for deploying AI-powered solutions to support these initiatives.

In areas with high wildfire exposure, utilities are shifting to more frequent, condition-based assessments for a faster way to detect and address anomalies. Our algorithms identify risks like damaged components, aging insulators, and vegetation encroachment early, so utilities can take action before an event occurs.

We are also seeing stronger alignment between utility risk mitigation plans and regulatory expectations, further driving the adoption of advanced inspection technologies.

DCI: With rising tariffs, supply chain instability, and increasing competition for rare earth minerals, how are today's macroeconomic pressures affecting Buzz's operations or the operations of your utility partners? What opportunities has this reality provided to adopt and scale new technologies?

KA: Macroeconomic pressures are pushing utilities to rethink how they manage and maintain their infrastructure. With rising costs and delays in sourcing equipment, there is a stronger focus on solutions that help extend the life of existing assets. Rather than full replacements, utilities are turning to predictive analytics and digital inspections to identify which components truly need attention.

Our platform supports this shift by helping utilities detect faults early and prioritize what needs to be fixed. Our AI, strengthened by feedback from experienced field technicians, ensures a high level of accuracy so teams can trust the insights. This reduces unnecessary replacements, improves planning, and helps utilities make smarter, more targeted investment decisions.

This transition to predictive operations is also being driven by regulatory and environmental expectations. Utilities are expected to show they are taking steps to prevent incidents like wildfires or grid failures. By giving them the tools to act proactively, we are helping them meet those standards while also making their operations more resilient.

DCI: As the U.S. faces growing pressure to modernize the grid, mitigate climate-related risks, and adapt to a changing energy landscape, where do you see the greatest legislative or regulatory opportunities and gaps in accelerating the adoption of AI-driven infrastructure monitoring?

KA: There is a clear opportunity to bring software into the center of the grid modernization conversation. Most funding and regulatory initiatives focus on physical infrastructure upgrades, but digital tools like AI can deliver significant risk reduction and reliability improvements with much lower capital requirements. Policymakers and regulators need to recognize that data intelligence is just as critical as hardware when it comes to building a more resilient grid.

At the same time, current inspection regulations are based on outdated models. Annual visual checks do not reflect what is now possible with modern technology. Regulators

have a chance to support condition-based monitoring and continuous data-driven assessments, which will improve safety and performance across the board.

There is also a gap in standardizing how AI is evaluated in utility environments. Clearer guidelines on data quality, model performance, and system integration would help more utilities adopt these technologies with confidence. Support for pilot programs, technical training, and data infrastructure investment would further accelerate adoption.

Buzz is committed to working with utilities, agencies, and industry partners to help shape those frameworks. We see a future where grid reliability, environmental safety, and operational efficiency are enhanced by real-time insights and smarter infrastructure monitoring, and regulation will play a key role in getting us there.