TWINIFY
TECHNOLOGIES
AN ASME COMPANY

USE CASE

Solar field

Optimizing sustainability and improving financial KPIs with the help of Twinify's groundbreaking energy-industry digital twins.

WWW.TWINIFY.COM

Challenges

Issues with depth of OEM visibility

Some OEM solutions only display fault codes, offering no top-level view of the fleet's performance. This ultimately means the organization only receives alerts when an individual component has failed, limiting the company's crisis response to a reactive approach.

Lack of insight into context-specific KPIs

Stakeholders who manage solar facilities must concern themselves with performance, risk, sustainability, and financial KPIs, depending on their role and task. The same OEM limitations that force reactive repairs also make it difficult for decision makers to readily see data with the level of depth, insight, and context they need to ensure positive outcomes.

Outcomes

A proactive approach with a full-fleet digital twin

With digital twins of the organization's entire fleet at their disposal, engineers can react to potential problems — and make forward-thinking decisions that save money, effort, and trouble — far more easily. The ML/AI models used go far beyond fault codes, providing potential causes of failure and presenting possible mitigation solutions, all in real time.

Data-backed operational efficiency

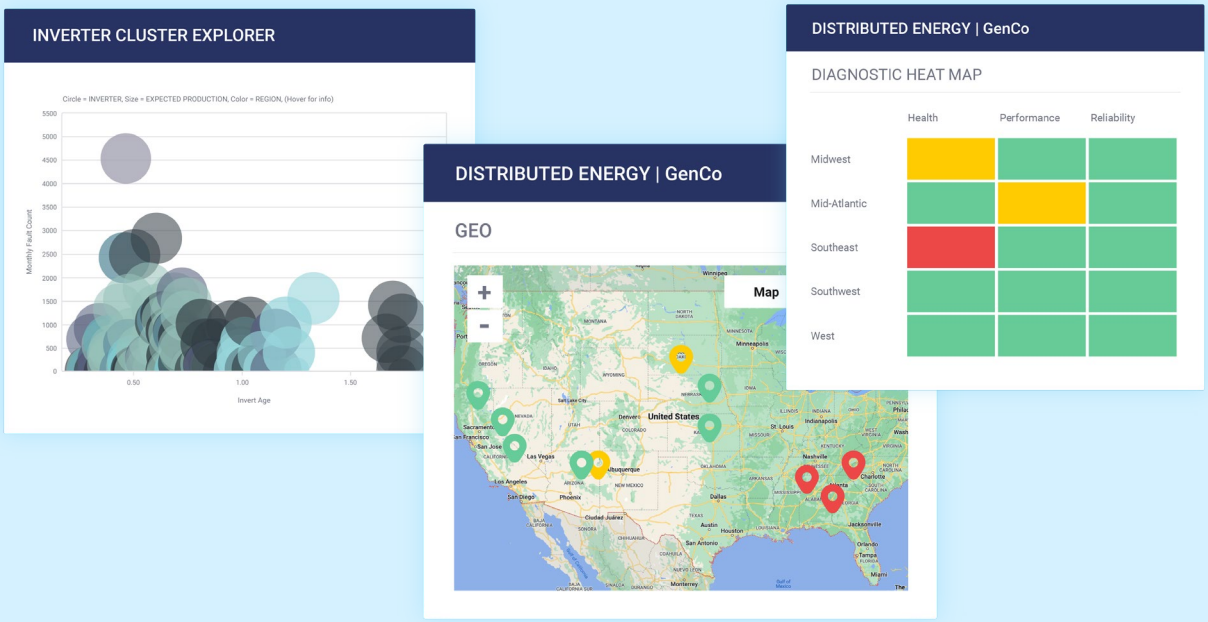
Twinify's digital twin solution aggregates KPIs, including performance degradation, at the site, region and fleet level. It displays this info through a straightforward, easy-to-read dashboard, which provides at-a-glance understanding of system health to a broad array of stakeholders. That, in turn, leads to better operational function across the scope of the business, with core tasks such as truck rolls benefiting from greater optimization and functional usage.

Stronger business decision-making on the fly

By monitoring site performance and predicting upcoming issues in real-time, energy producers are better equipped to make tough day-to-day decisions, such as the optimal time to schedule repairs. Combining new analysis, better data, and more overall flexibility makes it even easier and more cost-effective to run their solar fields at scale.

Enhancing the energy industry **decision-making process with Twinify**

Our digital twin solutions enable energy producers to make smarter decisions on the go.



1 Easy monitoring of risk areas

Customizable dashboards that visually represent exactly where each degradation or failure has occurred provide a smarter approach to problem solving.

2 Proactive decision-making, no matter your data

McKinsey estimates that some energy companies only use 20-30% of the data they generate on continual improvement. Twinify improves the process by incorporating your existing information — including data you aren't currently leveraging, or didn't know you could — into an advanced model that looks backwards and forwards to keep your present operation more secure and profitable.

3 Make the most of your current data

The data that solar and other power-production facilities generate doesn't exist in a vacuum. Interpreting it in new ways can lead to a better approach and greater return on existing installations. Twinify's analysis provides all-new ways to look at the data you currently generate — giving it all-new value in a host of practical settings.

Without Digital Twins	With Digital Twins
Only respond to failures	Address degrading assets before failure
Operational downtime	Assess cost/benefit of repair/ replacement options
No ability to measure KPIs	Real-time understanding of operations
Poor visibility of system health	Plan long-term strategy based on holistic view

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Reach out today to see why the future of power generation runs through Twinify.