

## A Modern Energy StartUp chooses Cloudwick's Amorphic Data Platform for AWS to manage its' solar microgrid project data and drive business insights with Amazon QuickSight



### Executive Summary

The Modern Energy StartUp is sustainable bitcoin mining and energy technology company working to solve modern energy challenges. First developed for mission critical military applications, the StartUp's energy systems today make energy generation and storage more sustainable, affordable, and abundant across business and industry, self-sustaining communities, and internet connected IoT products.

Cloudwick's Amorphic Data Platform for AWS provides the Modern Energy StartUp with a turn-key cloud data platform to manage analytics and act as a central data store. The Amorphic platform consolidates structured and unstructured data from the Startup's various field projects spanning numerous teams, locations, and project management tools. With Amorphic, the StartUp now has a one-stop summary of each of its different projects, with the ability to drill down into each projects' revenue, team structure, and timelines. The Modern Energy StartUp now can easily ingest data and share key information throughout the organization using Amorphic's role-based access controls on datasets. With Amorphic's Data Platform-as-a-Service capabilities, actionable data is accessible to every user regardless of assigned projects, and insights can be extracted at a finely detailed level.

### Customer challenge

The Modern Energy StartUp's employees capture volumes of data during the pre-sales and installation phases of their field solar projects. This data is recorded in a multitude of siloed tools and documents. The StartUp lacked a central data store for teams to access, and the existing data supply chain required manual aggregation, processing, and report generation. The StartUp needed to automate data management to:

- Build dashboards to better track data from different projects and across teams , including project completion and phase metrics
- Create readily sharable, detailed data summaries of microgrid projects

The Modern Energy StartUp did not have the skills to build or maintain a data platform on its own, and instead wanted a production ready, fully managed system to address these challenges.

### About the customer

The Modern Energy StartUp is a sustainable bitcoin mining and energy technology company that is solving modern energy challenges. Their energy systems were first developed for mission critical military applications and provide best-in-class technology agnostic solutions that deliver low-cost energy with high-level resiliency. The Modern Energy StartUp has many successful Microgrid deployments nationally and internationally.

## The Solution: Cloudwick's Amorphic Data Platform

With the Amorphic Data Platform for AWS, the Modern Energy StartUp transformed its data silos into a single cloud platform with native integration with 60+ AWS services. Using the Amorphic Platform, the StartUp cleaned and structured data formerly in silos, making it readily available and shareable across its teams. Data from external third-party Project Management tools was easily ingested by Amorphic. Data ingestion was also automated from heterogeneous sources like SFTP servers, AWS S3 buckets, and relational data.

To enhance its' historical analytics, the Modern Energy StartUp used Amorphic to create an archive store to trace changes made to any project, with a dashboard summary to report updates or changes across current and past projects.

In just four weeks, the StartUp was able to centralize the availability of its data, shifting from manually curated reports to up-to-date and detailed interactive dashboards that were available to all team members. (Examples in the graphic to the right).

## Customer success metrics

A key criterion for success was the ability for the Modern Energy StartUp's team to be able to easily track revenue by project, by manufacturer, and by stage with near real-time data. Additionally, the StartUp needed to be able to summarize projects, revenue, and manufacturers by location, and required the ability to drill down to project phase metrics when tracking the progress of a specific project to completion. The Amorphic Data Platform enabled the ingestion, transformation, governance, and management of data that could then be easily visualized in dashboards and reports in Amazon Quicksight and shared with users.

Additional success metrics for the Modern Energy StartUp included the Amorphic Platform's ability to enable dashboards in Amazon Quicksight to track the StartUp's team leads and team members by project, and to track team members by role. For projects with Utility companies, the Amorphic Data Platform enabled Amazon Quicksight dashboards to provide insight into the different types of batteries, PV panels, and invertors that were used and installed in each project.

## Amorphic Data Platform for AWS Dashboards



## Key AWS Technologies

- ✓ **Amazon Redshift**
- ✓ **AWS Glue**
- ✓ **Amazon S3**
- ✓ **AWS Lake Formation 2.0**
- ✓ **Amazon SageMaker ML\***
- ✓ **Amazon Kendra\***
- ✓ **Amazon Textract\***
- ✓ **Amazon Forecast\***
- ✓ **Amazon QuickSight**
- ✓ **Amazon DynamoDB**
- ✓ **Amazon Elasticsearch Service**
- ✓ **Amazon EC2**
- ✓ **AWS CloudWatch**
- ✓ **AWS CloudFormation**
- ✓ **AWS DMS**
- ✓ **AWS Lambda**
- ✓ **AWS CloudFront**
- ✓ **Amazon Appflow 2.0\***

\* Specific AWS Services not used by customer in this use case. All Services Listed are Enabled in the Amorphic Data Platform for AWS.

## Why AWS & Amorphic?

The Modern Energy StartUp team chose AWS as its cloud provider because of AWS' proven expertise in Data and Analytics. Cloudwick's Amorphic Data Platform was a natural next step, meeting the StartUp's requirement of a central data platform for AWS, ready for use "out-of-the-box" by a large number of users. Further, the Modern Energy StartUp wanted a solution that was available from an experienced AWS partner, and found the Amorphic solution to be a good fit to manage data both for near real-time analytics as well as for cold archive. The Amorphic platform provided ease of use, automation, and cost efficiency in a common platform for all the StartUp's users - analysts, developers, and executives - with virtually no development time and effort.

## Customer Benefits of the Amorphic Data Platform

- No IT skills required to build and manage a cloud data platform on AWS
- A centralized data platform as a single source of truth to transform and analyze data, natively integrated with 60+ AWS services to enable a SaaS experience
- Easy visualization and reporting of data with Amazon Quicksight dashboards
- Department and system data from multiple sources organized into usable domains
- Support for multiple data types (CSV, Parquet, etc.) and data sources (SFTP, S3, Third-Party Rest APIs, RDBMS)
- Role-based access control for users to share and consume datasets
- Ability to transform data in multiple stages of the pipeline
- Automate end-to-end data pipelines with no manual intervention

## About Cloudwick's Amorphic Data Platform:

Cloudwick's Amorphic Data Platform is a fully managed AWS ISV Certified data platform to migrate data and modernize analytics with zero IT development or support required. Amorphic natively integrates over 60 AWS services into one cloud data platform, enabling organizations to gain better insights from data using the modern cloud analytic stack. Cloudwick's Professional Services for Amorphic provides trusted and high impact data and analytic migration and modernization outcomes.

## About Cloudwick:

Cloudwick is an AWS-certified APN Advanced Consulting Partner and APN Advanced Technology Software Partner offering the Amorphic Data Platform for AWS. Cloudwick's Professional Services provides organizations with trusted and high impact data and analytic migration and modernization outcomes.

Founded in 2010 in Newark, CA, Cloudwick has over 140 technology professionals with 400+ Big Data certifications and over 100 AWS Certifications serving customers throughout the US, EMEA, and APAC. Cloudwick's Amorphic Data Platform is available direct, through the AWS Marketplace and through select resellers.

# Cloudwick

Contact us:

[sales@cloudwick.com](mailto:sales@cloudwick.com)

[www.cloudwick.com](http://www.cloudwick.com)