

BKV Modernizes Its Data Systems with Cloudwick's Amorphic Data Cloud for AWS

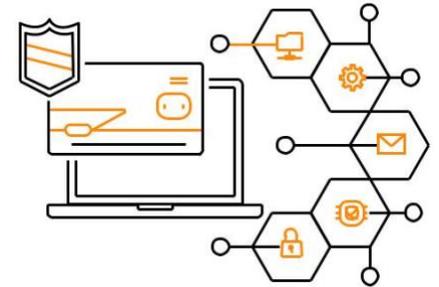
Executive Summary

BKV Corporation (BKV), a national natural gas exploration and production company, accelerated digital transformation and unified siloed data by migrating its data to the Amorphic Data Cloud for AWS (Amorphic), a solution provided by AWS Partner Cloudwick. Wanting to support its growth after a transformational acquisition and gain insights from its data, BKV needed access to advanced analytics tools and a centralized data cloud. By migrating to Amorphic, which natively integrates over 60 AWS services in its architecture, BKV gained a data platform to provide a single source of truth and advanced tools for cloud analytics. Now, BKV can use AWS services and artificial intelligence (AI) to automate complex processes.

Searching for a Centralized Data System

In 2020, [BKV](#) acquired more than 4,000 oil- and gas-producing wells in the Barnett Shale in North Texas, making it the [largest natural gas producer](#) in the area. As a result of the acquisition, the energy company's team grew from 40 to 225 employees, and the number of wells that it managed increased by a factor of 17. To support its expansion and future growth, BKV realized that it needed to unify the data from its siloed legacy data systems. "As an energy company that believes in making actionable change toward sustainability today, it was imperative that we had access to real-time data," says Bryan Becker, Vice President of IT at BKV. "We needed a system that was scalable and provided built-in competencies so that our team could immediately make changes and capitalize on opportunities."

After exploring multiple systems, BKV adopted a solution based on Amazon Web Services (AWS) from AWS Partner [Cloudwick](#). With the support of Cloudwick, BKV migrated to [Amorphic](#), a self-service and fully managed data cloud for AWS that makes it simple for IT, business, and data scientists to apply AI and machine learning (ML) to organizational data. With Cloudwick's solution, BKV is using cloud analytics to gain a competitive advantage in the energy industry, accelerating agility, productivity, and digital transformation.



About the Customer



[BKV Corporation](#) (BKV) is a natural gas exploration and production company based in Denver, Colorado. Founded in 2015, BKV operates over 4,000 oil and gas wells and is one of the top 20 natural gas producers in the United States.

Customer Quote

"I needed an AWS Solution Provider that understood Oil & Gas and could provide a new AWS data and analytic platform for modernizing BKV's pipeline operations and business analytics. In just 7 months Cloudwick had completely migrated and modernized our infrastructure, data, and systems into Amorphic and AWS, allowing my IT and Data Teams to act on our data faster, easier, and with better insights driving better business visibility and performance."

- Bryan Becker, Vice President of IT, BKV Corporation

Choosing the Amorphic Data Cloud for AWS

Founded in 2010, Cloudwick is a data cloud company focused on advanced consulting and technology solutions for data cloud consulting, migrations, and self-service and fully managed data systems for AWS. It supports companies in multiple industries, including energy, manufacturing, SaaS, gaming, healthcare, and financial services. Cloudwick's Amorphic removes data and analytics cloud complexity for IT and data teams across AWS services. Using Cloudwick's solution, companies can migrate all their data to AWS and modernize their legacy analytics using database, data warehousing, business intelligence, ML, and AI service capabilities regardless of available IT skills. "Using Amorphic, you don't have to build, operate, manage, or complete any integrations or performance tuning," says Mark Schreiber, General Manager at Cloudwick. "You get a self-service and fully-managed data platform on AWS that is production ready with near zero IT development or support required." Data users can access and use over 60 AWS data and analytics services on Amorphic—such as [Amazon Redshift](#), which uses SQL to analyze structured and semi-structured data across data warehouses, operational databases, and data lakes, and [Amazon SageMaker](#), which lets data engineers, data analysts, and developers build, train, and deploy ML models for virtually any use case. Cloudwick's platform facilitates self-service access to AWS services so that users can use their data with the right solutions.

With a small IT team and a desire to unify the data from legacy data systems, BKV engaged Cloudwick in July 2020 and found the AWS-powered solution to be efficient, effective, and simple to complete versus building its own solution. "One of the biggest advantages of Amorphic was that it was built on AWS, which provides access to a vast network of AWS Partners, ML and AI capabilities, as well as all of the new features that were being released," says Becker.

In August 2020, BKV participated in a data lake strategy workshop with the Cloudwick team. After identifying its goals, Cloudwick and BKV initiated the migration and modernization process in January 2021. To support the project, BKV received funding from the [AWS Migration and Acceleration Program](#) (AWS MAP), which helps accelerate cloud migration and modernization journeys with an outcome-driven methodology. "The investment from AWS MAP leveled our migration to the cloud," says Becker. "We felt valued and like AWS cared about where we wanted to go as a company."

Gaining Immediate Insights to Support Energy Operations

BKV saw immediate benefits after implementing the solution; in fact, several use cases were ready for production within 1 month after deploying Amorphic into BKV's AWS account. "In just 7 months, Cloudwick had completely migrated and modernized our data infrastructure into Amorphic on AWS," says Becker. "On Amorphic, our IT and data teams are able to act on our data faster, with more simplicity and with better insights, driving better business visibility and performance." BKV found that migrating to Amorphic was 1,600 percent faster than if it developed its own custom-built solution and that it was \$5.9 million cheaper over a 3-year period.

Amorphic connects BKV to tools that support the ingestion, transformation, and analysis of data from multiple sources, including enterprise resource planning, production accounting, and Internet of Things devices. For example, BKV streams data from supervisory control and data acquisition systems in near real time using [Amazon Kinesis Data Streams](#), a serverless streaming data service that makes it simple to capture, process, and store data streams at virtually any scale. ML models on Amazon SageMaker are applied to cleansed and standardized data and used to generate insights, which are then fed into custom third-party dashboards connected to Amorphic. With this visibility, BKV can perform immediate analysis on its field data as soon as it is available, produce insights, and make decisions to streamline its operations.

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 OpenSearch**
- ✓ **Amazon EC2**
- ✓ **AWS CloudWatch**
- ✓ **AWS CloudTrail**
- ✓ **AWS DMS**
- ✓ **AWS Lambda**
- ✓ **AWS CloudFront**
- ✓ **Amazon Appflow 2.0**

BKV is also automating and streamlining complex processes, unlocking significant value across its organization. One of its first use cases involved [Amazon Textract](#), an ML service that automatically extracts text, handwriting, and data from scanned documents. BKV has more than 4,000 wells; it must collect monthly midstream reports for each well and then calculate and pay royalties to each lessee for the gas produced. This can be a complex and time-consuming process. One unit of production might yield royalties that need to be paid to dozens of working interest participants. Using Amazon Textract, BKV and Cloudwick built an AI-powered solution that automatically pulls information from midstream contracts and writes the royalties to an accounting production system, alleviating the manual processing burden for its production accounting teams. "By using Amazon Textract for our production accounting, we have more accurate results because the calculations are performed by computer vision rather than a human," says Becker. "We saw an immediate return on investment by using AWS and the capabilities built into Amorphic." With its solution built on Amazon Textract, BKV calculates royalties in a matter of hours rather than the hundreds of hours per month it had needed for manual data transcription.

Accelerating Digital Transformation with the Support of Cloudwick

On Amorphic, BKV has the tools and capabilities necessary to perform advanced analytics and unlock the full power of its data. The company is continuing to work with Cloudwick to advance its capabilities. "We are supporting BKV in skills empowerment for its business users," says Schreiber. "We are helping employees understand the types of datasets that they need to create so that they can make better decisions and improve visibility on production systems."

In 2022, BKV plans to develop new applications, use cases, analytics, and assets on Amorphic. For example, it plans to connect data from its geographic information systems to Amorphic and develop a mobile application that summarizes data from legacy applications. "At BKV, we want our teams to use the latest and greatest technology but also be able to support our older applications," says Becker. "On Amorphic, we make sure that our teams have all the tools that they need to gain the most value out of our data."

About Cloudwick:

Cloudwick is an AWS-certified APN Advanced Consulting Partner and Technology Software Partner offering the Amorphic Data Cloud 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 six AWS Competencies and 210 technology professionals with 400+ Big Data certifications and over 100 AWS Certifications serving customers throughout the US, EMEA, and APAC. Cloudwick's Amorphic Data Cloud is available direct, through the AWS Marketplace and through select resellers.

Cloudwick

Contact us:

sales@cloudwick.com

www.cloudwick.com