



Future-proofing  
Payer Data Platforms

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# A Modernization Playbook for Blue Cross Blue Shield (BCBS) Plans

Automate data estate  
modernization, accelerate  
transformation, and unlock  
GenAI innovation with  
Impetus + AWS

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## A Modernization Playbook for Blue Cross Blue Shield (BCBS) Plans

### The payer imperative: Why modernization can't wait

Blue Cross Blue Shield (BCBS) plans collectively serve nearly 115 million Americans. Yet many plans remain tethered to:

- Aging **data warehouses and ETL tools**
- Rigid **job schedulers and workflows**
- Fragmented **claims, member, and provider data**
- **Legacy BI systems** that slow insight generation

### At the same time, payers are under unprecedented pressure:

#### Margins below 1% in some regions

Many regional payers and providers are operating at razor-thin margins — often below 1% — due to rising labor costs, medical inflation, and declining Medicaid enrollment.

#### Rising administrative burden

According to [McKinsey](#), U.S. health system administrative costs exceed **\$1 trillion annually**, with payers shouldering a major share.

#### Shrinking Medicaid enrollment

[Moody's](#) projects that payer margins will continue to compress as Medicaid redeterminations roll back pandemic expansions.

#### Growing regulatory demands

CMS audits and HIPAA penalties continue to escalate — with fines of up to **\$1.5M per violation category per year**

Meanwhile, opportunities are exploding – cloud-native platforms, real-time analytics, GenAI, and GenBI can help BCBS plans achieve faster claims cycles, reduce fraud, improve member services, and differentiate in competitive markets.

This playbook explores how [Impetus + AWS](#) empower BCBS organizations to modernize **faster, safer, and at scale**.

## 2 Modernization pressure points

### Where BCBS plans lose time and budget

Across the payer landscape, similar pain points emerge:

#### Legacy ETL & BI

Tools like Informatica, SSIS, Cognos, and Tableau lock budgets into license-heavy stacks

#### Outdated orchestration

- Heavy reliance on AutoSys or Control-M creates slow, brittle batch cycles
- Audit requirements amplify overhead and risk

#### Data silos

- Claims, member, and provider data reside in disconnected systems
- Slow insights delay fraud detection and member engagement

#### Outdated orchestration

Legacy stacks can't feed AI/ML pipelines with the clean, governed, real-time data they require

Up to **50%** of IT spend goes to maintaining these outdated workloads (IDC, 2024).

## 3 The opportunity for BCBS

### Why modernization is the strategic lever

By reimagining data platforms on AWS, BCBS plans can:

- **Reduce costs** by retiring expensive ETL, BI, and warehouse licenses
- **Accelerate claims cycles** and fraud detection with automation and real-time pipelines
- **Enable compliance by design** with HIPAA/HITRUST-ready data architectures
- **Unlock innovation** with GenAI, ML, and predictive analytics across the member journey

## Blueprint for a cloud-first, GenAI-ready foundation

A modernized payer data platform built on AWS enables speed, compliance, and scalability:

- **Data Ingestion** - Clean, integrate, and secure claims, provider, and member data
- **Data Lakehouse (Amazon S3 + Amazon Redshift)** - A single source of truth for all payer data
- **BI with Amazon QuickSight** - Deliver real-time dashboards for compliance and operations
- **ETL with AWS Glue** - Replace legacy tools with automated, elastic pipelines
- **Orchestration with Amazon MWAA (Airflow)** - Streamline workflows, replace AutoSys/Control-M
- **AI/ML with Amazon SageMaker & Amazon Bedrock** - Enable fraud detection, claims optimization, and member engagement through GenAI



## 4 How Impetus + AWS make it happen

Automate data estate modernization	Impetus LeapLogic™	Converts <b>60–80%</b> of ETL/BI workloads automatically, preserving business logic
	Orchestration Modernization	Transition from rigid job schedulers to scalable, audit-ready Amazon MWAA
Innovate	GenAI Labs	Launch rapid pilots for call center bots, claims triage, fraud detection, and workforce analytics
De-risk	Compliance by Design	Architectures aligned to <b>HIPAA, HITRUST, CMS</b> mandates

## 5

### High-impact use cases for BCBS

Use Case	Business Benefit
ETL to AWS Glue	Automate thousands of legacy workflows
Legacy Orchestration tool to Amazon MWAA	Speed up claims cycles with audit-ready logs
Legacy BI to Amazon QuickSight	Cut BI license costs, modernize compliance reporting
GenAI Labs	Deploy secure pilots for claims triage & member service
Vector Search + ML	Improve fraud detection & provider matching

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### BCBS success snapshot

#### Built a GenAI-ready data platform on AWS for a Blue Cross Blue Shield (BCBS) organization

Automated workload migration and orchestration re-engineering helped BCBS unlock real-time analytics, cost savings, and GenAI adoption

##### Key challenges

- High infrastructure and operation and maintenance (O&M) costs with Teradata, Talend, and legacy ETL tools
- Long development cycles with heavy manual intervention
- Complex, fragmented orchestration flows across StoneBranch and custom scripts
- Limited elasticity and automation, restricting cost-effective scaling of analytics

## Strategic goals

To remain competitive and improve member services, the organization sought to:

- Modernize its data warehouse, ETL, and orchestration landscape
- Enable faster claims cycles, fraud detection, and real-time member analytics
- Build a cloud-first, HIPAA/HITRUST-compliant data foundation to prepare for GenAI adoption

## Solution

**BCBS partnered with Impetus + AWS** to modernize its data estate through LeapLogic-powered automated migration and re-engineering:

- Automated migration of Teradata workloads to Amazon Redshift and ETL pipelines to AWS Glue
- Re-engineered orchestration from StoneBranch/ custom scripts to Amazon MWAA (Airflow)
- Built a HIPAA/HITRUST-ready AWS-native platform enabling scalability, cost-efficiency, and GenAI readiness

## Impact

- Accelerated modernization: Migrated multiple Teradata and ETL workloads within months
- Lower TCO: Eliminated expensive Teradata + ETL licenses; moved to AWS-native stack
- Reduced effort & risk: LeapLogic automation cut re-engineering time and manual intervention
- Improved agility: Reliable, streamlined orchestration flows enhanced claims + reporting timeliness
- Future-ready platform: Supports batch and real-time analytics, enabling GenAI use cases (claims optimization, member services, fraud detection)

## 7 Your modernization roadmap

### Step-by-step to a cloud-first future

- **Readiness assessment:** Identify workloads, cost savings, and risks
- **Migrate & validate:** Scale to production, ensure compliance
- **Pilot with Impetus LeapLogic:** Test migration on sample ETL/BI workloads
- **Innovate with GenAI:** Retire legacy infra, add real-time ML/GenAI capabilities

## 8 Why Impetus + AWS

- **25+ years** of payer modernization expertise
- **200+** AWS-certified professionals
- **AWS Premier Tier Partner** with Data & Analytics + Healthcare competencies
- Proven BCBS and healthcare success stories
- Among the **top 150 AWS partners** in the Americas
- **Access to AWS credits to accelerate pilots**

## 9 Ready to modernize?

**Blue Cross Blue Shield** organizations continue to play a pivotal role in shaping U.S. healthcare. With intensifying regulatory pressures, the demand for seamless claims processing, and the shift toward data-driven, AI-enabled care, BCBS plans need trusted partners who can modernize at scale while ensuring compliance, efficiency, and innovation.

**Impetus, together with AWS**, is uniquely positioned to accelerate this journey. From **legacy workload modernization** (ETL, mainframe, workflow orchestration) to building **cloud-native data platforms**, enabling **GenAI-driven insights**, and powering **member-centric innovations**, we help BCBS plans achieve measurable outcomes: **reduced costs, faster time-to-market, and improved member experiences**.

[Book your free BCBS modernization assessment today!](#)