Case Study:

Content Ingestion Modernization for a Leading US Media Conglomerate

Executive Summary

A **Top US Media Conglomerate** owns and operates nearly **200 broadcast and digital brands**, including one of the **largest US TV stations**, with audiences spanning news, sports, entertainment, and lifestyle. Their legacy publishing stack was hosted on an enterprise WordPress provider, designed primarily for editorial workflows. While stable, it lacked the agility to integrate new content formats and scale to meet evolving digital distribution needs.

The organization was looking to **modernize its digital infrastructure** and carve out new services from the monolithic CMS, while minimizing operational disruption.

PREPARED BY

Flatiron Software

The Challenge

The customer's business challenges were
both technical and strategic:

Key Client Needs ———

- **Multi-Source Content Ingestion**: They needed to ingest content from multiple third-party and internal sources, across **different formats** (RSS, JSON, XML, and proprietary feeds).
- **Standardization and Distribution**: Content needed to be normalized and served consistently across nearly **200 brand websites**, all powered by WordPress.
- **Performance Under Load**: High-traffic events (breaking news, live sports) required low-latency responses at scale.
- **Partnership Enablement**: The company wanted to unlock **new partnerships and distribution channels** by easily integrating external feeds.
- **First AWS Deployment**: This project represented the **first AWS production workload**, requiring strict compliance, security, and alignment with enterprise IT standards.
- **Future-Proofing**: Beyond this service, leadership wanted a repeatable modernization path that could gradually migrate workloads away from the WordPress monolith.

Why AWS ———

- **Breadth of Services:** A full suite of compute, storage, networking, and DevOps tools to build a flexible ingestion pipeline.
- **Serverless Options:** AWS Lambda allowed a cost-efficient, event-driven architecture.
- **Global Reach:** Amazon CloudFront's CDN ensured performance across diverse markets.
- **Security & Compliance:** Amazon VPC and IAM controls aligned with enterprise governance.
- **Developer Velocity:** Integrated DevOps tooling (CodeCommit, CodePipeline, CodeDeploy) enabled automated CI/CD.

The Solution

Flatiron Software deployed a dedicated team of four engineers over 12–14 months to design, implement, and optimize a cloud-native ingestion service.

Architecture Overview

- **Amazon API Gateway:** Delivered secure RESTful endpoints consumed by custom WordPress frontends.

- **AWS Lambda (Node.js):** Ingested and transformed feeds from multiple sources and formats (RSS, JSON, XML), applying business logic in a serverless runtime.

- **Amazon RDS for PostgreSQL:** Served as the system of record for metadata and structured content storage.
- Amazon S3: Provided highly durable object storage for ingested assets, media files, and backups.

- **Amazon CloudFront:** Distributed cached responses globally, reducing load on the ingestion service.

- **Amazon VPC:** Provided network segmentation and secure connectivity.

- **Amazon EC2:** Supported staging and integration testing environments.

- **AWS CodeCommit, CodePipeline, and CodeDeploy**: Enabled CI/CD automation for reliable, zero-downtime deployments.

This microservice carved out a modern cloud-native layer from the WordPress monolith, creating a foundation for future services.

Results & Benefits

- **Revenue Growth**: By rapidly onboarding new content partners and feeds, the company opened up **significant new revenue streams**.

- **Scale Across 200 Brands**: The ingestion service is now leveraged across **nearly 200 properties**, powering diverse use cases from local TV stations to national digital brands.

- **Reduced Latency**: Amazon CloudFront reduced response times, ensuring reliable performance during breaking news and peak traffic events.

- **Faster Time-to-Market**: With CI/CD pipelines, the company can integrate new partners and deploy updates in days instead of weeks.

- **Cost Efficiency**: Serverless architecture reduced infrastructure overhead and operational costs, with AWS Lambda scaling automatically to traffic demands.

- **First AWS Production Service**: This project successfully introduced AWS into the company's enterprise IT environment, proving its value and reliability.

- **Future-Proof Foundation**: The system serves as a **repeatable modernization model**, setting the stage for video workflows, direct-to-consumer distribution, and broader cloud adoption.

Results & Benefits

AWS
Services Used

- Amazon API Gateway
- AWS Lambda
- Amazon RDS for PostgreSQL
- Amazon S3
- Amazon CloudFront
- Amazon VPC
- Amazon EC2
- AWS CodeCommit
- AWS CodePipeline
- AWS CodeDeploy

Looking Ahead

The Top US Media Conglomerate is now exploring AWS Elemental services — MediaLive and MediaConvert — to extend its platform into video processing and live streaming. Additional workloads are being evaluated for migration into AWS, building on the proven ingestion framework delivered by Flatiron Software.

Sidebar

Customer: Leading US Media Conglomerate
Industry: Media & Entertainment
Use Case: Multi-format content ingestion and distribution
Team Size: 4 engineers
Project Duration: 12–14 months

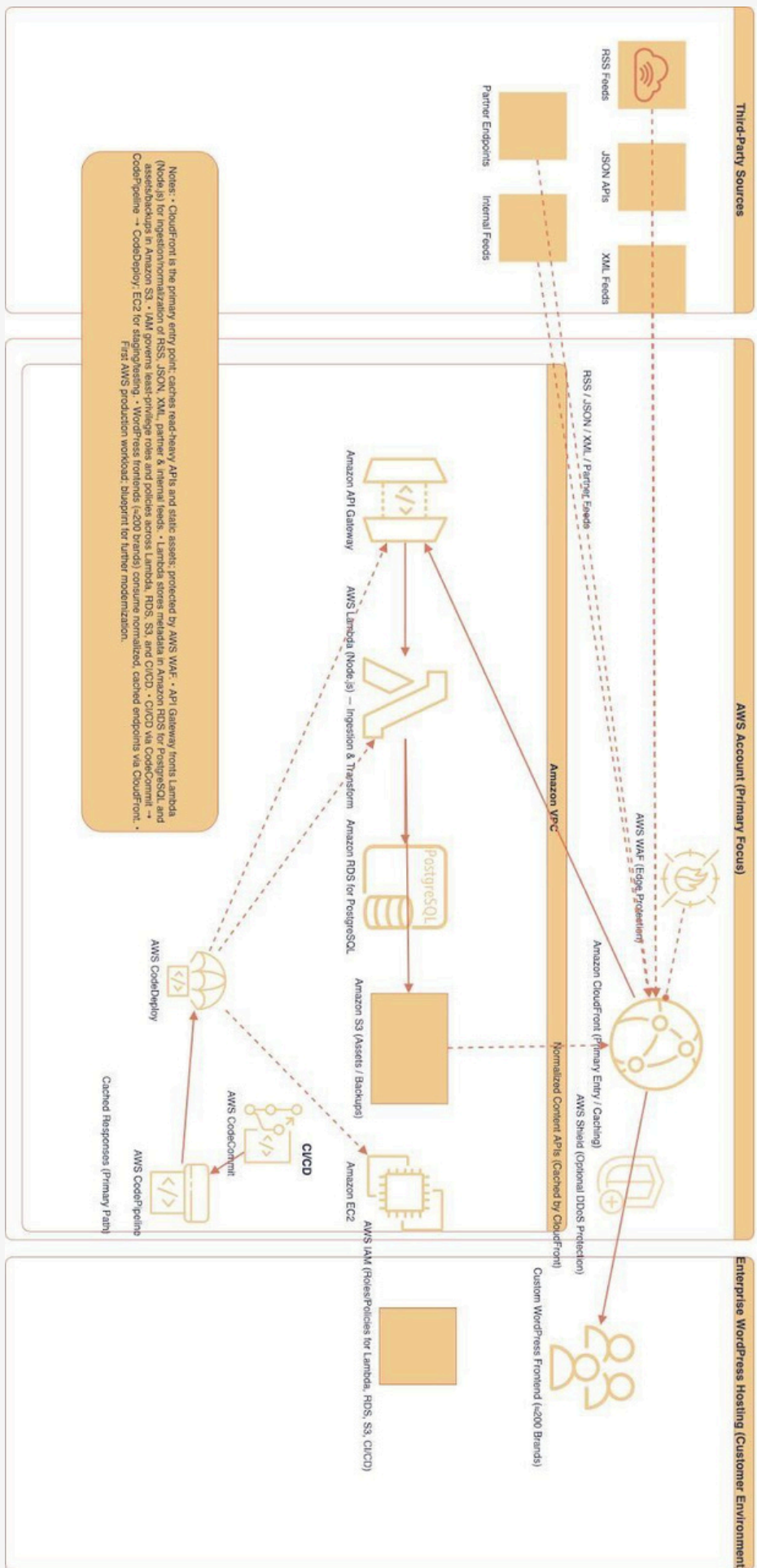## AWS Services Used

- Amazon API Gateway
- AWS Lambda
- Amazon RDS (PostgreSQL)
- Amazon S3
- Amazon CloudFront
- Amazon VPC
- AWS CodeCommit / CodePipeline / CodeDeploy
- Amazon EC2

Business Impact

- First AWS production workload
- Platform scaled across 200 brands
- Enabled new partnerships and revenue growth
- Reduced latency with global caching
- Created a repeatable modernization framework

Content Ingestion & Distribution — Flatiron / Anonymous Media Conglomerate

Third-Party Sources
- RSS Feeds
- JSON APIs
- XML Feeds
- Partner Endpoints
- Internal Feeds

AWS Account (Primary Focus)

RSS / JSON / XML / Partner Feeds

AWS WAF (Edge Protection)

Amazon CloudFront (Primary Entry / Caching)

AWS Shield (Optional DDoS Protection)

Amazon VPC

Amazon API Gateway

AWS Lambda (Node.js) — Ingestion & Transform

Amazon RDS for PostgreSQL

PostgreSQL

Amazon S3 (Assets / Backups)

Normalized Content APIs (Cached by CloudFront)

AWS CodeDeploy

CI/CD

AWS CodeCommit

AWS CodePipeline

Cached Responses (Primary Path)

Amazon EC2

AWS IAM (Roles/Policies for Lambda, RDS, S3, CI/CD)

Enterprise WordPress Hosting (Customer Environment)

Custom WordPress Frontend (<200 Brands)

Notes: • CloudFront is the primary entry point; caches read-heavy APIs and static assets; protected by AWS WAF. • API Gateway fronts Lambda (Node.js) for ingestion/normalization of RSS, JSON, XML, partner & internal feeds. • Lambda stores metadata in Amazon RDS for PostgreSQL, and assets/backups in Amazon S3. • IAM governs least-privilege roles and policies across Lambda, RDS, S3, and CI/CD. • CI/CD via CodeCommit → CodePipeline → CodeDeploy; EC2 for staging/testing. • WordPress frontends (<200 brands) consume normalized, cached endpoints via CloudFront. • First AWS production workload; blueprint for further modernization.

Flatiron Software

Leading US Media Conglomerate

Why Flatiron?

Flatiron delivers complex AI transformation projects at enterprise scale—fast, independently, and with no disruption to your existing teams. Our model lets you capture the value of AI while protecting your core business and product roadmap. From project management to technical delivery, we bring deep expertise, proven process, and clear accountability.

Ready to see what AI can do for your platform—without the risk or overhead?
Let's talk.

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