cloudGeometry

Convert any CPG into IoT

Case Study

thinfilm

Transforming CPG with IoT

Thinfilm's NFC cloud uses smart labels to connect consumer, industrial, and location-based IoT with unified analytics and logistics worldwide, slashes cost of tracking any product anywhere any time.

thinfilm

INDUSTRY

Digital Marketing, Supply Chain and Consumer Packaged Goods

SOLUTION

Data Management, Analytics, DevOps Lifecycle Services, IoT, Blockchain

CLIENT

Thinfilm Electronics

cloudGeometry

Thinfilm

Now that smartphones everywhere means digital connectivity anywhere, any physical goods you can hold in your hand can become a rich digital experience. Thinfilm NFC makes the connection seamlessly, with sensor technology printed on smart labels, attached to a variety of packages. Anything that can be labeled can be tracked at any and every step from factory to consumers' homes — and in real time. Because Thinfilm labels make every unit secure and perfectly unique, it can create a continuous and complete stream of data every time someone chooses to interact with that unique item.

The Challenge

To record any discrete interaction between a physical object and any person with a smartphone, securely and at massive scale, ThinFilm needed a global cloud platform. With a simple tap, it needed to record any tracking and analytics data across oceans – to enable seamless tracking by manufacturers, distributors, and consumers. At every step, they all needed complete confidence in the integrity of the data, at every unique point in the value stream.

The Solution

Thinfilm needed to operate a global footprint at consumer-scale, to track the tap of a smartphone anywhere in the world. CloudGeometry AWS DBMS Migration Services helped them move to AWS Aurora RDBMS, migrating off of multiple standalone regional database instances, scattered either as individual EC2 servers or hosted in servers in regional CoLos. This solution let marketers (Thinfilm customers' end-users) connect directly with consumers, right as the product is in consumers' hands. Each simple tap of that smartphone creates a trackable, immutable 1-1 interaction, lighting up rich data to drive campaigns and analytics.

To turn any tap on a smart label into an IoT device payload, Thinfilm NFC enables multi-state data capture and transmission. That does away with the complexity of deploying and managing discrete connected devices.

Migration to global RDBMS	AWS Aurora gave Thinfilm better, globally consistent DBMS price-performance, including replicas running inside and outside the great wall of China.
Integrated IoT Applications	CloudGeometry CI/CD makes it easier to onboard new IoT data payloads like NFC, iterating thru agile development, deployment, release management, and production operations.
Secure, transparent blockchain apps	Distributed ledger workflows delivered advanced 1-1 marketing and analytics with tokens, secure user accounts, and contracts for supply chain provenance.

CloudGeometry

Thinfilm

The Solution

CloudGeometry also helped Thinfilm extend its cloud platform to provide immutable supply chain traceability with blockchain. Integrated with the Ethereum blockchain app platform, it creates a specific, permanent, and unalterable digital history of provenance — transparently accessible by consumers.

The Benefits

Thanks to the AWS cloud platform, Thinfilm has successfully accelerated introductions of a broad array of applications and digital commerce solutions into new markets worldwide.

Migration to global RDBMS	AWS Aurora gave ThinFilm better, globally consistent DBMS price-performance, including replicas running inside and outside the great wall of China.
Integrated IoT Applications	CloudGeometry CI/CD makes it easier to onboard new IoT data payloads like NFC, iterating thru agile development, deployment, release management, and production operations.
Secure, transparent blockchain apps	Distributed ledger workflows delivered advanced 1-1 marketing and analytics with tokens, secure user accounts, and contracts for supply chain provenance.

CloudGeometry

Technology Solutions & Services
to build, optimize and run your cloud software and operations.

CloudGeometry

TECHNOLOGY SOLUTIONS

APPLICATION MODERNIZATION
Transform Legacy Systems
for Future-Ready Innovation

CLOUD COST MANAGEMENT
Optimize Cloud Spending
for Maximum ROI and Efficiency

AI & DATA
Achieve breakthrough automation and analytic
insights via cutting-edge data strategies

SECURITY AND COMPLIANCE
Reinforce your cloud infra, workload,
operations, and development end-to-end

FOUNDATION SERVICES

CLOUD INFRA & OPS
Robust Infrastructure Solutions for Seamless
Operations

- DevOps as a Service
- Managed Cloud Operations
- Cloud Spend Optimization
- Resilience, Continuity & Backup
- AWS Well-Architected

MODERNIZATION & MIGRATION
Smooth Transitions to Modern Architectures
with Minimal Disruption

- Application Modernization
- Kubernetes Adoption
- AWS Database Migration
- Data Engineering Operations
- Data Integration
- Data Migration
- Cloud Migration & Adoption

ADVANCED SERVICES

CLOUD-NATIVE DEVELOPMENT
Build Scalable, Resilient Applications with
Cloud-Native Technologies

- CI/CD
- Multi- Platform App Design &
  Development
- Cloud-Ready Teams
- Enterprise SaaS Modernization
- Multi-Tenancy SaaS
- B2B Customer Success Engineering

CLOUD-NATIVE OPERATIONS
Streamline Operations with Advanced
Cloud-Native Practices

- Platform Engineering
- Workload Management
- Monitoring & Observability
- Infrastructure Management

AI/ML & DATA SERVICES

AI/ML & DATA
Leverage Advanced Analytics and Machine
Learning to achieve exponential acceleration in
the ROI of your data assets

- AI/ML Engineering for Data Analytics
- Generative AI
- Traditional ML for Data Analytics
- AI/ML Development and and Data Science
- Data Engineering for MLOps

CloudGeometry

London Berlin Prague

New York Cluj-Napoca

San Francisco Montenegro

Tel Aviv

CloudGeometry delivers expert technical services, helping our clients unlock the full potential of cloud-native open source tooling and commercial platform technologies.

With roots in Silicon Valley, we've seen firsthand what works (and what doesn't). Count on CloudGeometry to accelerate application modernization, Kubernetes adoption, developer enablement, secure multi-tenancy, AI/MLOps, DevOps automation and more.

- As **AWS Advanced Consulting** partners, our certified solution architects and platform engineers help address the range of challenges facing enterprise innovators and venture funded startups alike.

- The **Cloud Native Computing Foundation** has accredited us as a **Kubernetes Certified Service Provider**.

- We serve as charter contributors to the **Linux Foundation Data & AI Commons** (LF Data & AI), supporting a diverse, sustainable ecosystem for open source data and AI technologies.

Over the last decade, we've built and deployed hundreds of big, fast full-stack apps with well-engineered cloud infrastructure across industries: Financial Services, Industrial Automation, Healthcare, AdTech, Consumer-grade Mobile, smart devices, and more.

From enterprise upgrades to data engineering to cloud-native scale-out, CloudGeometry helps you plot the shortest path across all dimensions of modern cloud software engineering.

aws partner network

Advanced Consulting Partner

SaaS

Amazon Kinesis

AWS Lambda

Amazon Redshift

AWS Database Migration Service

kubernetes CERTIFIED SERVICE PROVIDER

CLOUD NATIVE COMPUTING FOUNDATION

GENERAL MEMBER

LF AI & DATA

GENERATIVE AI COMMONS

CloudGeometry

CloudGeometry

Expert
Platform Engineering
& DevOps

Cloud Infrastructure
 & Application
Modernization

AI & Machine Learning
Data Services

Open Source
Tooling & Integration

CloudGeometry.io

+1 408 444-7061

info@cloudgeometry.io

github.com/cloudgeometry

100 S Murphy Ave #200

Sunnyvale, CA

94086 USA