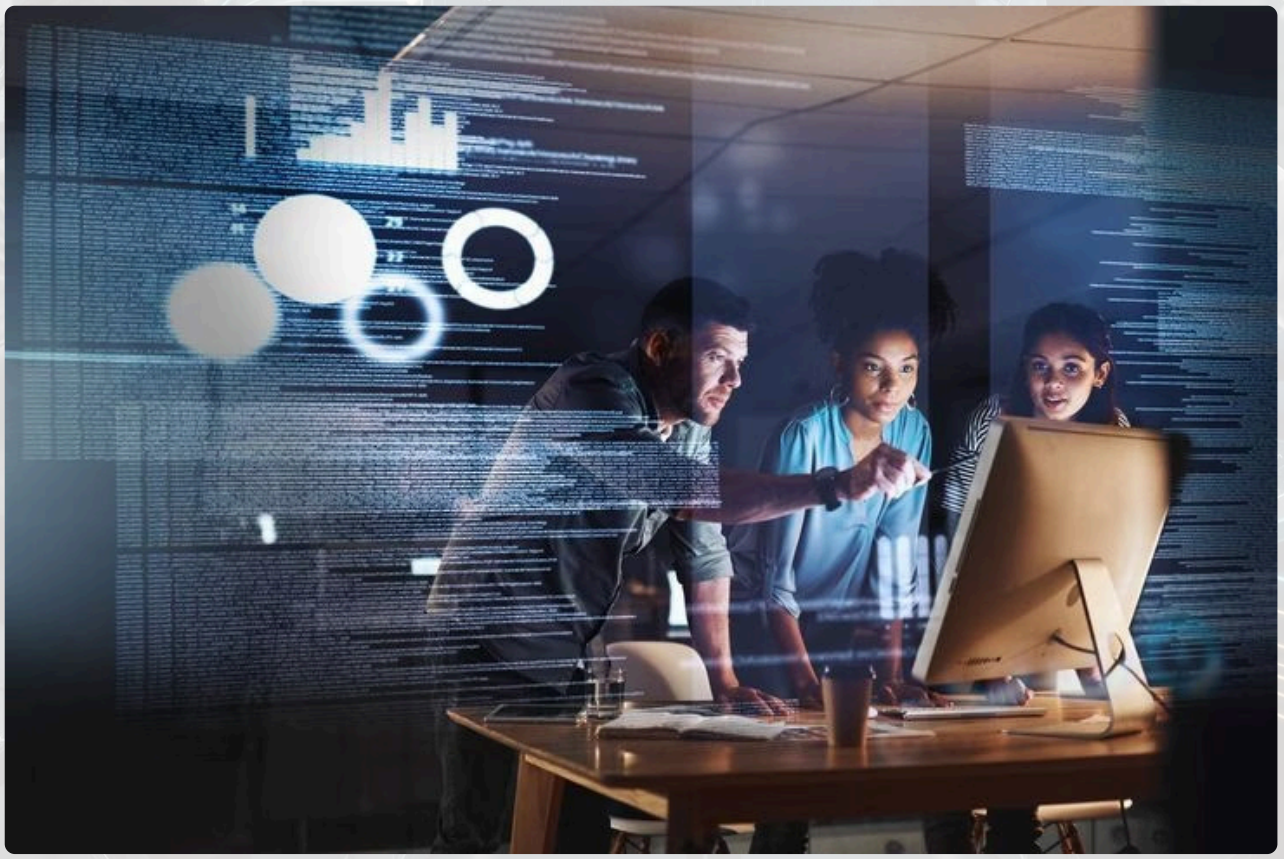
lemnisk

Composable CDP + Reverse ETL
The Future of Real-Time Customer Data Activation

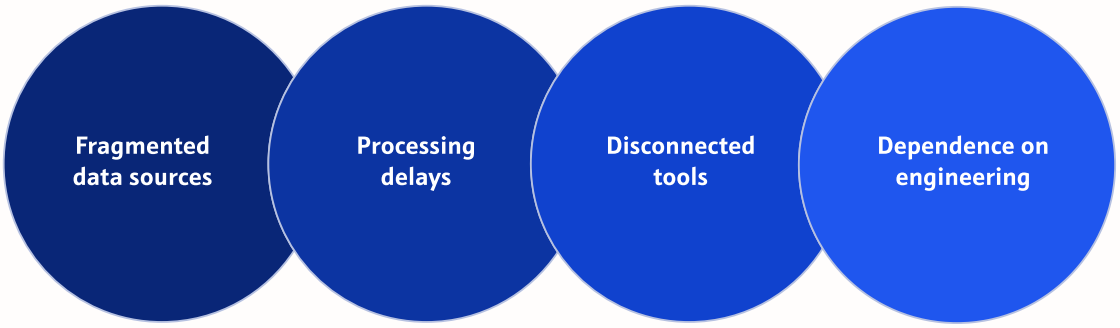
In today's hyper-digital economy, businesses are not struggling to collect data—they are drowning in it. Every click, swipe, purchase, and interaction generates valuable customer data. Yet, despite having access to vast volumes of information, most organizations fail to use it effectively.

This is where two powerful approaches have emerged: **Composable Customer Data Platform (CDP)** and **Reverse ETL**. Together—when intelligently integrated—they redefine how businesses activate customer data.



The Data Paradox in Modern Marketing

This paradox exists because data is often fragmented across systems, delayed in processing, and disconnected from the tools that actually drive customer engagement. Marketing teams frequently depend on engineering teams to extract insights, leading to delays that can cost real-time opportunities.



The Problem

Fragmented Data

Data fragmented across systems

Delayed Processing

Delayed in processing

Disconnected Tools

Disconnected from engagement tools

Engineering Bottleneck

Bottlenecks slow insights

The Solution

1

Composable CDP

Organize and unify data

2

Reverse ETL

Activate data across operational tools

Individually, both are transformative. But together—when intelligently integrated—they redefine how businesses activate customer data. This is where **Lemnisk** stands out—by seamlessly combining both approaches into a unified, AI-powered platform that enables real-time, hyper-personalized customer experiences.

Understanding Composable CDP



A Composable CDP is not a traditional, all-in-one platform. Instead, it is a flexible architecture that leverages an organization's existing data infrastructure—primarily its data warehouse—to collect, organize, and activate customer data.

Keep Data In-House

Keep data within their own warehouse, avoiding duplication and maintaining governance

Best-in-Class Integration

Integrate best-in-class tools across the stack for maximum flexibility

Scalability

Enable flexibility and scalability tailored to organizational needs

Composable CDP emerged as a response to the limitations of rigid, monolithic systems. They prioritize modularity—allowing organizations to build a system tailored to their needs rather than adapting to a fixed platform. At their core, composable CDP focus on:

Data Unification

Across multiple sources

Identity Resolution

Single customer view

Real-Time Processing

Live data at every moment

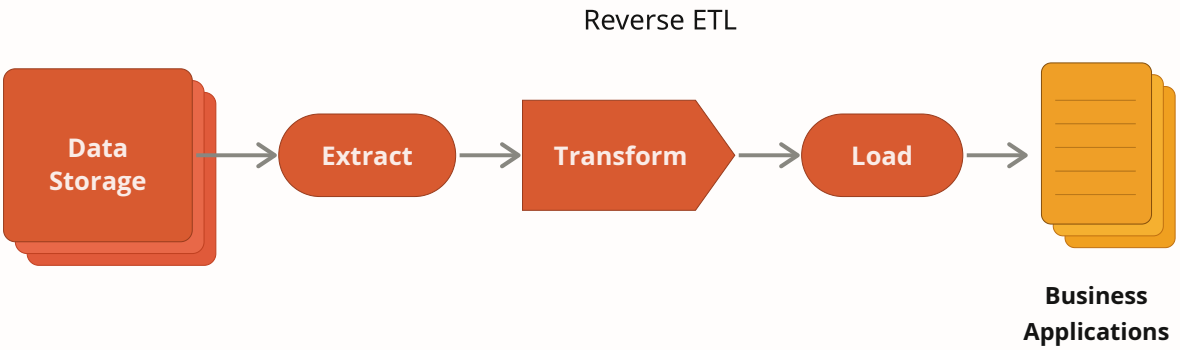
Flexible Activation

Through APIs and integrations

However, while composable CDP excel at organizing and structuring data, they do not inherently solve the challenge of delivering that data into operational tools in real time. That's where Reverse ETL comes in.

Understanding Reverse ETL

Reverse ETL (Extract, Transform, Load in reverse) is designed to activate data. Instead of moving data into a warehouse, Reverse ETL takes curated data *from* the warehouse and syncs it into business tools like:



CRM Systems

Sync enriched profiles directly into customer relationship management tools

Marketing Automation

Push audiences and segments into platforms that drive campaigns

Advertising Platforms

Deliver audiences to ad platforms for targeted, relevant campaigns

Customer Engagement Tools

Activate data in the tools where decisions and actions happen

Limitations of Reverse ETL Alone

As industry experts highlight, Reverse ETL is powerful for activation but cannot replace a full CDP—it lacks the depth needed for complete customer understanding.

- It depends entirely on the quality and structure of warehouse data
- It lacks native capabilities for identity resolution
- It does not provide real-time behavioral enrichment on its own

> In simple terms, Reverse ETL ensures that the insights sitting in your data warehouse don't stay there—they are pushed into the tools where decisions and actions happen.

The Missing Link: Why Businesses Need Both



Modern customer engagement requires three things:

1

Unified, Real-Time Customer View

A complete, consolidated picture of every customer across all touchpoints

2

Continuous Enrichment

That data must be continuously enriched with live behavioral signals

3

Instant Activation Across Channels

Insights must be pushed into operational tools the moment they are generated

Using only one approach creates gaps:

CDP Without Activation

= **Insight without action**. Data is organized but never reaches the tools that drive engagement.

Reverse ETL Without a CDP

= **Action without intelligence**. Data is pushed but lacks the depth for true personalization.

This is why forward-thinking organizations are moving toward integrated architectures that combine both capabilities. And this is exactly where **Lemnisk** differentiates itself.

How Lemnisk Combines Composable CDP and Reverse ETL



Lemnisk is not just another CDP—it is a **composable, AI-powered customer data and activation platform** designed to unify, enrich, and activate data in real time.

Composable Foundation: Built on Your Data Warehouse

Lemnisk's architecture is composable by design. Instead of forcing businesses to move data into a proprietary system, it allows them to use existing warehouses like **Snowflake, BigQuery, Databricks, or Redshift**, maintain full control over data storage and governance, and build flexible data models using SQL. This ensures that the warehouse remains the **single source of truth**, reducing redundancy and improving data consistency.

Real-Time Data Unification and Identity Resolution

One of the biggest challenges in customer data is fragmentation. Customers interact across websites, mobile apps, emails, and offline channels. Lemnisk solves this through **entity-level identity resolution**, linking multiple identifiers into a single unified customer profile. This creates a **360-degree customer view**, combining behavioral data, transactional data, engagement signals, and preferences. As a result, businesses can understand not just who the customer is—but what they are doing right now.

Continuous Real-Time Enrichment

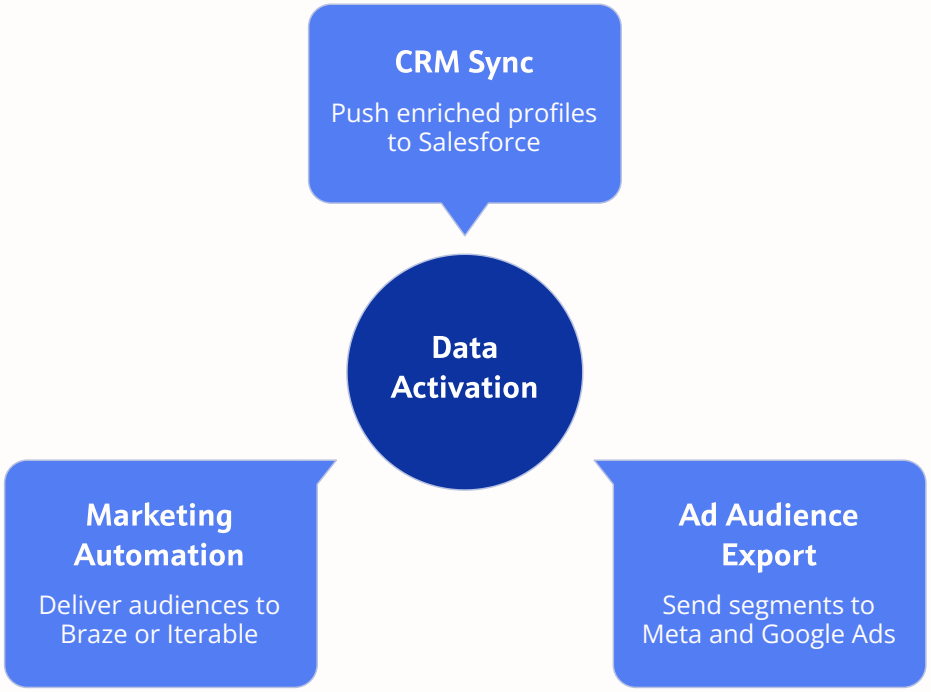
Lemnisk continuously enriches warehouse data with real-time interactions such as website visits, app activity, purchases, and engagement metrics. This means customer profiles are not static—they evolve in real time. Instead of relying on outdated snapshots, businesses get **live, dynamic customer intelligence**.

Reverse ETL Activation & AI-Powered Decisioning

Reverse ETL: Seamless Data Activation

Lemnisk integrates Reverse ETL directly into its platform, allowing businesses to:

- Sync enriched customer data into CRM tools like **Salesforce**
- Push audiences to ad platforms like **Meta and Google Ads**
- Deliver data to marketing automation tools like **Braze**



This happens automatically and continuously—eliminating manual exports, delays, and engineering dependencies.

The result? Marketing teams get **instant access to actionable data**. Campaigns can be executed in real time. Customer experiences become truly personalized.

AI-Powered Decisioning and Personalization

Lemnisk goes beyond just data movement—it adds intelligence. Its AI capabilities enable:

Predictive Scoring

Anticipate customer behavior before it happens

Audience Segmentation

Dynamically group customers by real-time signals

Journey Orchestration

Guide customers through personalized paths

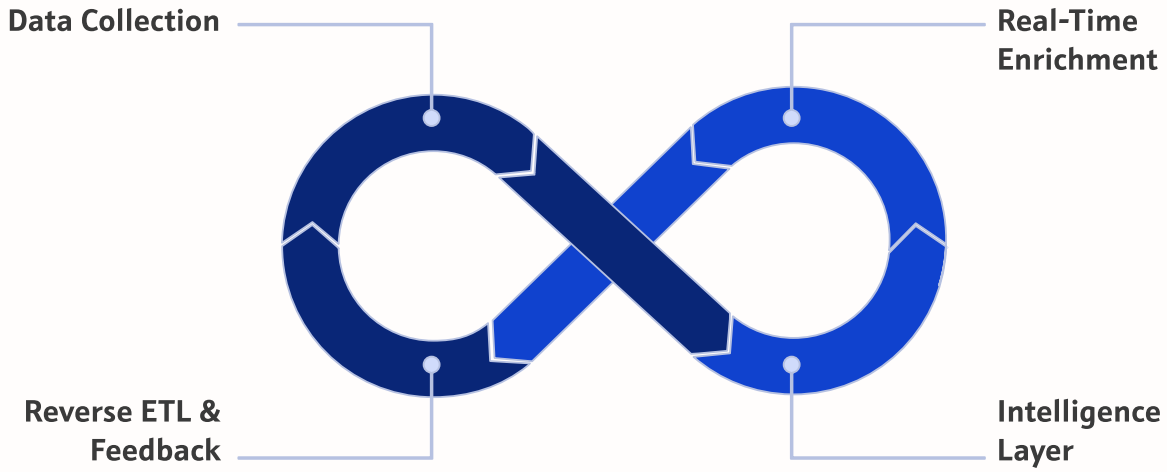
Real-Time Personalization

Deliver 1:1 experiences at scale across multiple channels

Instead of generic campaigns, customers receive personalized recommendations, timely offers, and contextual messaging—all driven by real-time data and AI insights.

The Combined Impact: From Data to Decisions in Real Time

By combining composable CDP architecture with Reverse ETL, Lemnisk creates a closed-loop system. This creates a **real-time, self-improving data ecosystem**.



Step 1: Data Collection & Unification

Data flows into the warehouse from multiple sources and is unified into a single customer profile.

Step 2: Real-Time Enrichment

Customer profiles are continuously updated with live interactions and behavioral signals.

Step 3: Intelligence Layer

AI models analyze data to generate predictions and insights.

Step 4: Reverse ETL Activation

Data is pushed into operational tools where actions are executed.

Step 5: Feedback Loop

Customer interactions feed back into the system, continuously improving accuracy and performance.

Key Benefits of Lemnisk's Combined Approach



Real-Time Customer Engagement

Businesses can act on customer behavior instantly, rather than hours or days later.

Elimination of Data Silos

All data—online and offline—is unified into a single, consistent view.

Reduced Dependency on Engineering Teams

Marketing teams can access and activate data without constant technical support.

Faster Time to Market

Campaigns can be launched and optimized quickly.

Hyper-Personalization at Scale

AI-driven insights enable personalized experiences across millions of customers.

The future of customer data is not about choosing between CDP and Reverse ETL—it is about combining them intelligently. Lemnisk represents a new generation of platforms that respect existing data infrastructure, enable real-time intelligence, and deliver seamless activation. It bridges the gap between **data engineering** and **marketing execution**, ensuring that insights are not just generated—but acted upon instantly.

Conclusion: The Future is Composable and Activated



As customer expectations continue to evolve, businesses must move beyond static data strategies. They need systems that are flexible, real-time, intelligent, and actionable.

Composable CDP

Provide the foundation — organizing, unifying, and structuring customer data at scale.

Reverse ETL

Provides the activation — pushing enriched data into the tools where action happens.

Lemnisk

Brings them together into a unified, powerful solution — with AI-powered intelligence at every step.

> In a world where timing and relevance define success, the ability to transform data into real-time action is no longer optional—it is essential.