



CASE STUDY

Multinational Retail Corporation Safeguards 60 Million Customers' PII with ALTR

Results at a Glance

- ✓ Rapid Deployment Without the Need for Professional Services
- ✓ Advanced Data Protection & Guaranteed Compliance
- ✓ Enhanced Visibility and Accountability Across Teams
- ✓ Cloud-Native Flexibility for Future-Proofing

This multinational lifestyle retail corporation is a prominent player in the lifestyle and fashion sector. With a strong physical presence in the United States, Canada, and Europe, along with a robust online shopping platform, the company caters to a diverse customer base.

In direct-to-consumer retail, safeguarding personally identifiable information (PII) is not just a necessity—it's the foundation of customer trust and brand loyalty.



With over 60 million customers worldwide, this company understands the critical responsibility of protecting the sensitive data entrusted to them. To fortify their data security and maintain compliance with stringent privacy regulations across multiple countries, they partnered with ALTR. Together, they implemented best-in-class data security measures like dynamic data masking, custom format-preserving encryption and scalable data access control. These proactive steps demonstrate the retailer's unwavering commitment to protecting customer information, ensuring a secure shopping experience, and fostering enduring trust in their brand.

The Challenge

Protecting 60 Million Rows of Customer PII

This global retailer, managing a vast database of over 60 million rows of personally identifiable information (PII), faced a significant challenge: balancing robust data security with operational usability. As the company consolidated merchandising and marketing data into a unified Snowflake cloud data warehouse, the volume and sensitivity of stored PII—including names, email addresses, cell phone numbers, and mailing addresses—exponentially increased.

The company's primary mission was clear: ensure that employees have access to the data they need for their roles while preventing any unauthorized access to sensitive information.

The company's data team prioritized two key objectives:

Restricting Internal Access: Ensuring that employees only accessed data essential to their roles while minimizing the risk of unauthorized access or misuse.

Maintaining Data Usability: Preserving the utility of sensitive data for reporting and analytics, ensuring business operations remained efficient.

As a small yet highly skilled data team, the global retailer looked for a partner to amplify their impact and accelerate their efforts, all while staying focused on their core priorities.

The Solution

Custom PII Masking Policy

ALTR collaborated closely with the company to devise a two-step strategy starting with a tailored masking policy for customer PII, followed by advanced access controls.

The custom masking policy went beyond basic column-level protection, addressing the retailer's need for nuanced and context-aware masking. For example, a unique masking pattern was generated for each email address, ensuring sensitive information remained protected while still usable for analytics and reporting.

With ALTR's Snowflake-native integration, the company implemented advanced masking policies directly within their Snowflake environment, ensuring seamless protection of sensitive data without disrupting workflows or impacting performance. ALTR simplified the process by eliminating the need to write and manage complex policies in SQL, offering an intuitive UI for straightforward configuration and an API to automate policy enforcement at scale. This streamlined approach not only accelerated implementation and reduced the risk of errors but also provided full visibility into data access, enabling



the company to maintain robust security while operating with maximum efficiency.

They also need to mask email addresses without disrupting downstream processes, where traditional masking often renders fields unusable. By leveraging ALTR's Post Hook functionality, the global retailer implemented a scalable solution that securely masked sensitive fields while maintaining full compatibility with their existing workflows and analytics—ensuring security without compromising usability.

Format-Preserving Encryption

The company needed a flexible encryption solution to protect PII within their Snowflake environment while meeting their specific business needs. With ALTR's Post Hook extensibility, they seamlessly integrated custom encryption into their workflows, automatically applying protection whenever data was accessed or processed. This approach ensured advanced data security without disrupting operations, giving the retailer the agility to address evolving security threats and regulatory requirements with confidence.

Real-Time Data Protection Dashboard

Snowflake's data logs, while comprehensive, come with a critical limitation: activity monitoring is delayed by over two hours, leaving a significant gap in real-time visibility. ALTR addressed this challenge by creating a real-time data activity monitoring solution tailored specifically for the company, providing instant insights into how sensitive data is accessed, by whom, and how often.

Collaborating closely with the company's team, ALTR

designed a custom dashboard that unified security and data operations. This dashboard delivered a detailed, real-time view of data access, showing exactly which roles were accessing specific datasets, from which locations, at what times, and in what quantities or frequencies. By making this information actionable, the dashboard empowered both data and security teams to work cohesively and make faster, more informed decisions.

ALTR's Data Protection Monitoring (DPM) added another layer of sophistication by integrating data governance into the monitoring framework. The dashboard not only tracked access but also distinguished between data protected by policies and data actively secured through encryption or masking. This comprehensive view gave the company unparalleled insight into the effectiveness of their data security strategy, helping them identify risks, ensure compliance, and maintain confidence in their operations.

The Results

Rapid Deployment without the need for Professional Services

The company was able to enable masking across hundreds of tables in under 5 minutes—thanks to ALTR's seamless integration and turnkey approach. This eliminated the need for extensive coding or manual API calls, saving valuable time for their data team and accelerating their data security rollout.

Advanced Data Protection & Guaranteed Compliance

ALTR's extensibility enabled the company to seamlessly integrate a custom encryption solution

into their data workflows, safeguarding sensitive PII across storage, transit, and processing. This flexibility ensured robust security while maintaining data usability and future-proofing their encryption strategy.

With ALTR's platform, the company gained full control over encryption keys, data access policies, and key rotation strategies. This granular control allowed them to adapt quickly to evolving regulatory requirements and maintain continuous compliance with global standards like GDPR and CCPA.

Enhanced Visibility and Accountability Across Teams

ALTR's custom Data Protection Dashboard empowered both security and data teams by bridging the gap between their objectives. For security teams, it demonstrated that critical controls were being consistently applied and actively enforced. For data teams, it ensured that security measures were integrated seamlessly into workflows, allowing operations to continue without disruption.

The DPM dashboard provided actionable, real-time insights into data access patterns—detailing who accessed customer PII, when, and how much. This level of transparency reduced the risk of internal misuse and external breaches while fostering greater accountability across the organization. By uniting security and data teams around a shared view of data protection, the global retailer achieved both stronger governance and operational alignment.

Cloud-Native Flexibility for Future-Proofing

The company gained unmatched flexibility through ALTR's cloud-native platform, enabling them to confidently adapt their security strategy to any workflow or tool in their data ecosystem. Whether integrating with ETL pipelines, data catalogs, or bespoke analytics, ALTR's extensibility ensured that security controls seamlessly aligned with their evolving needs.

This future-proof approach gave the global retailer the confidence to scale their data operations, knowing that ALTR's platform could support their goal to continually enhance their data security maturity without compromising performance or usability. Regardless of how their data workflows or regulatory requirements change, the company is equipped to maintain robust security and operational efficiency.

“With ALTR, security becomes effortless—you don't have to think about it. It's seamlessly integrated into our operations. Now, my new standard for vendors is defined by the ease and reliability I've experienced with ALTR.”

- Tim, Senior Manager