

## Wealthsimple

# Wealthsimple protects sensitive customer data in Amazon Redshift while powering hyper-growth

Moving to need-to-know access without sacrificing innovation and growth



## Company Background

Wealthsimple is a financial company on a mission to help everyone achieve financial freedom, no matter who they are or how much they have. Using smart technology, Wealthsimple takes financial services that are often confusing, opaque, and expensive and makes them simple, transparent, and low-cost. Their portfolio includes Wealthsimple Trade, Canada's first commission-free stock trading platform, Wealthsimple Crypto, allowing users to securely buy, sell and hold cryptocurrency assets using a simple mobile app, and Wealthsimple Cash, a peer-to-peer money transfers app launched in April 2021.

### Size:

501-1000 employees

### Location:

Toronto, Ontario

### Industry:

Financial Services



## Business Need

Wealthsimple, has gone through unprecedented growth over the last several years. The growth accelerated further as Wealthsimple expanded its portfolio to launch Wealthsimple Crypto in August 2020, enabling cryptocurrency transactions through the mobile app and Wealthsimple Cash in April 2021, bringing peer-to-peer money transfer to Canadian consumers.

Wealthsimple's loyal customers trust them with the most sensitive data, including personally identifiable information (PII) such as name, date of birth, social insurance number, and financial data including stock, mutual funds, cryptocurrency portfolio, and peer-to-peer money transactions.

Wealthsimple's data scientists, business analysts, and engineers work with the data in Wealthsimple's data warehouse Amazon Redshift to monitor, analyze and improve customer operations. WealthSimple's data engineering team realized that they need to move to need-to-know access to protect sensitive consumer data without slowing down the innovation and growth.



## Evaluating legacy solutions for need-to-know access

Wealthsimple was looking for a solution that can be implemented with minimal changes to their Amazon Redshift warehouse and their BI solution, Periscope Data. These requirements ruled out multiple data security and governance solutions requiring extensive modifications to the data store schema, adding new accounts with administrative access, and requiring extensive changes to the BI tool to make it work with the solution. **They found several deficiencies while evaluating legacy solutions for the data access:**

- Users must be recreated in the solution as the solution did not integrate with their identity and access management solution, Okta.
- Columns had to be mapped to data types manually, as the solution did not support dynamic mapping.
- BI users were not recognized in the solution as the solution worked with the generic database user who was common to all Wealthsimple employees.

These deficiencies, especially lack of support for the BI users for access configuration, ruled out the legacy solutions for implementing the need-to-know access at Wealthsimple.

## Benefits of Satori's Platform



Seamless integration with user identity from **Okta** - no need to create the users in Satori



Data classification, masking and filtering for PII and financial data in **Amazon Redshift** data warehouse with security policies.



Pre-built comprehensive audit trail and reporting for privacy, security, and compliance



No changes to schema or configuration for the **Amazon Redshift**, no need to create additional accounts for Satori

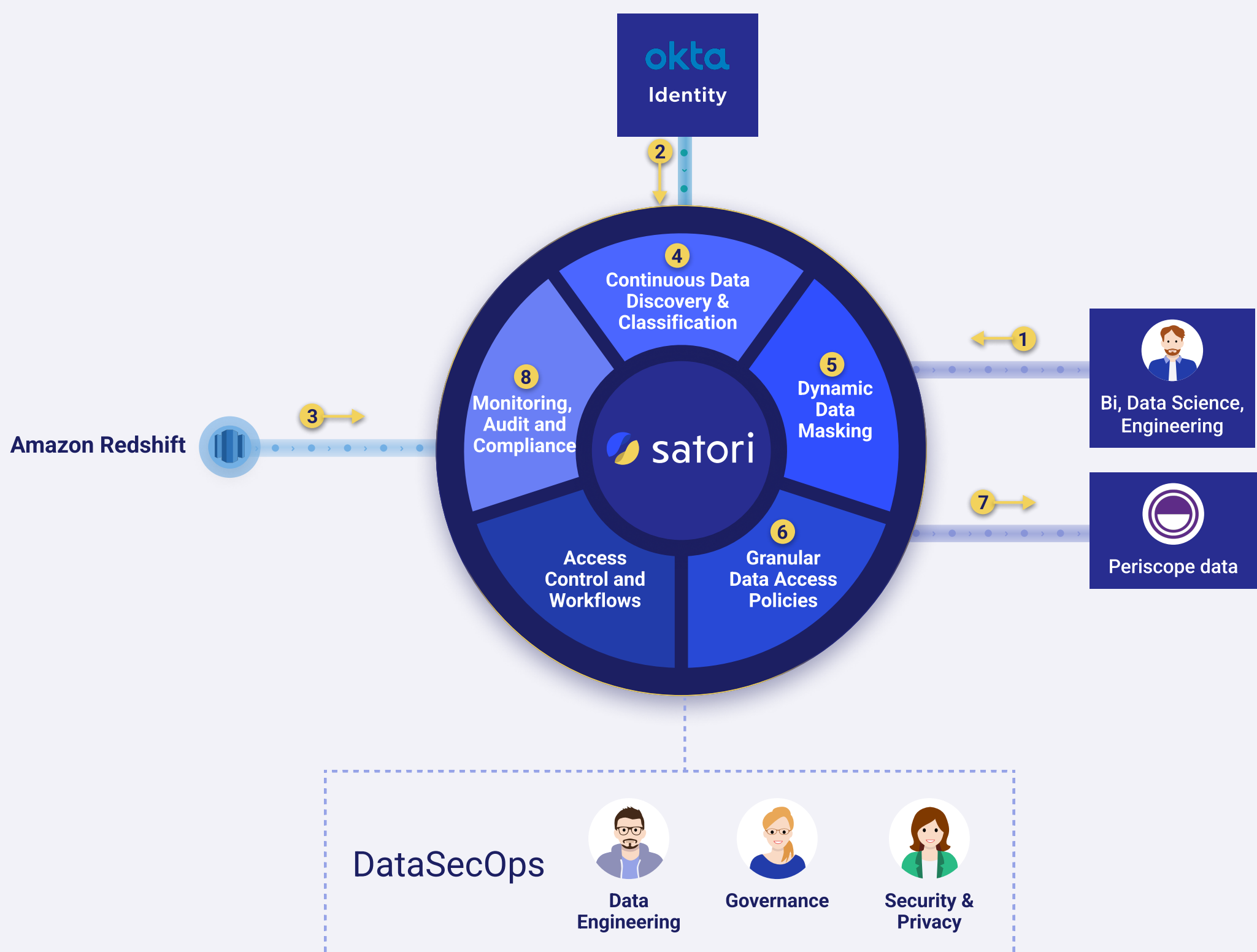


Non-intrusive deployment for end-users allowing them to continue working with their preferred **BI platform**, Periscope Data, without any additional training or changes to queries



## Securing sensitive data at Wealthsimple with DataSecOps

- 1 Data scientists, analysts, and engineers query **Amazon Redshift** through **Satori** with **Periscope**.
- 2 **Satori** gets user context from **Okta**.
- 3 **Satori** triggers access policy workflow and sends a query to **Amazon Redshift**.
- 4 **Satori** inspects and classifies the result dataset.
- 5 **Satori** applies dynamic masking rules to PII and financial data to protect it as per the user's access privileges.
- 6 **Satori** applies data filters to the result dataset as per the user's access privileges.
- 7 User (data scientist, analyst, engineer) gets the masked and filtered query result in Periscope.
- 8 Data privacy, security, and compliance teams monitor access to sensitive PII and financial data with out-of-box reports.





## Result

Wealthsimple deployed Satori as their DataSecOps solution in days to monitor, classify, and control access to the sensitive PII and financial data for their Amazon Redshift cloud data warehouse. Data engineers configure and maintain the data masking and filtering rules as a part of the security policy for each role in the organization using Satori's intuitive GUI. Over six hundred users from business intelligence, data science, and engineering teams use the BI platform, Periscope Data, and query Amazon Redshift via Satori. Satori integrates with Okta for retrieving users' organizational affiliations. Satori's DataSecOps platform delivers the following business functionality for Wealthsimple:

- 1 Identify PII and financial data in real-time, as the data is retrieved for queries.**
- 2 Enforce dynamic data masking based on Wealthsimple's policy for access to sensitive data based on the user's identity, department, and the role and type of data.**
- 3 Apply data filtering based on Wealthsimple's security policy for the row, role, and attribute-based access control based on the user's identity, department, function, and data type.**

Additionally, the privacy, security, and compliance teams utilize pre-built reports for monitoring access to sensitive PII and financial data.



Satori's DataSecOps platform allowed us to implement the need-to-know access to protect sensitive customer PII and financial data without slowing down the pace of innovation and growth. The solution was implemented in days and required no changes to the Amazon Redshift data warehouse or Periscope Data, the BI solution.

**Wealthsimple**

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