



SOLUTION BRIEF

Home & Auto Insurance

2020

The Background

The pace at which the home and auto insurance industries are adopting data-driven approaches to drive efficiency, customer service and profitability is increasing.

Providers use the full spectrum of analytic approaches, including machine learning, to combine personal client data, such as income, address and credit score, with external data sets, like census data, incident trends, crime rate and geographical conditions, in order to quickly determine client suitability, risk, policy recommendations and premiums. These factors also impact the client selection process and, ultimately, an insurance firm's profitability.

The Challenge

Given the nature of the home and auto insurance industries, sales, data and operations teams alike handle volumes of sensitive personally identifiable information (PII) on a daily basis. Yet, agencies' internal structures create inherent data protection challenges.

Agents often work independently with an ever-changing set of clients, and regularly collect personal information including address and social security numbers. Meanwhile, underwriters who evaluate risk utilize information such as a client's vehicle history or credit score. Both functions may need access to common data sets, but it must be managed for use on an as-needed basis. For instance, a home insurance agent with a high profile client needs access to their full name and address for communications purposes, but an underwriter, who just needs the first three numbers of a zip code to assess risk, should not have the full name or address. In this case, exposing the name and address is unnecessary and could pose risks in the wrong circumstances, not just to the client's privacy but also to the insurance firm's reputation.

An added layer of complexity is data sharing amongst decentralized insurance agency offices and/or third parties. For example, auto insurance

agencies need to share client information to process claims following an accident. Another instance of third party data sharing is when checking credit score. With such sensitive data involved in these processes, operating standards must be clear and uniformly applied to avoid any data slipping through the cracks.

The burden is then put on data engineering teams to create and implement sufficient data access controls to protect client privacy, and to ensure those controls are working as intended. First American Title Insurance was the first organization to face legal enforcement under 23 NYCRR 500 after it was unable to implement and prove adequate data protection measures following a leak of sensitive client data. Not only does the company face monetary penalties, but its reputation was damaged as a result of its deficient data protection measures.

The ability to manage independent functions and sensitive personal information at scale without risking reputational damage is a challenge home and auto insurance companies often face, but seldom have a straightforward, scalable way to solve.



The Solution

To help data teams efficiently manage data access at scale, prevent the mishandling of policyholder information and adhere to stringent regulatory guidelines, home and auto insurance companies need a comprehensive, all-in-one solution that can satisfy the data needs of individuals in various functions across the organization – not a patchwork of disparate tools.

In order to meet these rigorous demands, home and auto insurance firms enlisted Immuta, the automated data governance company.

- Immuta's dynamic, fine-grained access controls ensure the right data is available to the right people at the right time. Data engineers implement attribute- and purpose-based access controls to mitigate the risk of sensitive data being shared inadvertently with unpermitted data consumers. This reduces the burden on data teams to monitor inter-department or inter-organizational data sharing.
- To ensure that client account information never gets into the wrong hands within or between functions, home and auto insurers employ Projects, Immuta's controlled workspaces, for collaboration. With Projects, data engineers can segregate, manage and audit analytical activities, allowing employees to work across client cases without raising conflicts of interest or security risks.
- Home and auto insurance agencies employ multiple systems to warehouse and manage client account information, and Immuta allows them to deploy data protection measures consistently across those systems. This eliminates the need for data teams to make copies of data, which introduces more risk into the process, or write new policies for each system or user, which is time consuming, labor-intensive and delays speed to data access.
- Data teams within insurance organizations further protect sensitive data while maximizing its utility with Immuta's privacy enhancing technologies. Advanced methods including k-anonymization, randomized response, dynamic data masking and differential privacy help advance ML systems, enabling insurance agencies to provide personalized policies that are better able to quantify and account for client risk.
- Home and auto insurance companies receive new client account information with each new policy or claim. With so much information passing through agencies' systems and strictly enforced regulations, data teams need to be able to produce thorough data audits and reporting. Immuta's unified audit logs and automated reports monitor and show who accessed what data, when and for what purpose to prove compliance both from a regulatory and a contractual standpoint.



By incorporating Immuta's automated governance and privacy capabilities, we have enhanced our overall strength and security of the platform.

– Steve Petrevski,
SVP and General Manager,
Data & Analytics Services at Aon

The Outcome

As a result of implementing Immuta, home and auto insurance agencies are not just more compliant with industry standards and regulations, but they are also better able to protect sensitive client data at scale. In turn, this allows them to:

1. Grow client business faster by streamlining compliant, collaborative access to data and reducing the data preparation time required of data teams. This allows for more immediate, secure data sharing and risk assessment, faster claim reviews and processes and better ability to scale and keep pace with new policies and claims.
2. Onboard new agents and third party resources compliantly by enabling dynamic data access controls. This drives collaboration across functions and organizations, and allows agents to work across locations seamlessly.
3. Improve customer service by maximizing the utility of personal data to create personalized insurance policies, while ensuring secure, compliant data practices. This in turn protects and improves insurance firms' reputations.
4. Increase profitability by eliminating the need for data teams to manually prepare data, allowing data consumers to access, utilize and derive insights from data faster. This enables higher quality risk assessments that result in a healthy client selection process and insurance policies that are mutually beneficial for the clients and the insurance agency.

