



# TOP 5 DATA CHALLENGES FACING INSURANCE COMPANIES



# Top 5 Data Challenges Facing Insurance Companies

Challenges Insurance is Facing:

- 1. Improved Customer Experience**
- 2. De-Silo Insurance Data**
- 3. Risk Assessment and Mitigation**
- 4. Fraud Mitigation and Prevention**
- 5. Business Performance**

Insurance companies have been collecting data for as long as they've been around in order to assess risk, set policy prices, and answer customer queries. Most times, however, the data is forgotten about after the policy is issued and is consigned to a dusty filing cabinet or ageing legacy database.

But insurers are missing out on a goldmine if they don't think about data as a strategic asset. It's now more important than ever that they capitalize on the massive amounts of data they have collected and turn that data into actionable, insights-driven business outcomes.

To do this, insurers need technology that supports innovation, aligns with business goals, and keeps a pace that surpasses the competition.

## Here are the top 5 data challenges facing insurance companies and how to avoid them.

### 1. Improve Customer Experience

Expectations from customers have never been higher. With that comes the demand on insurers to improve every aspect of the customer experience. Companies who do are rewarded with improved customer satisfaction ratings, more referrals, increased revenue per customer, and lower churn.

When approaching a problem as complex as customer experience, companies need as much data as they can get to better understand each part of the customer journey. What channels are the customers using for contact or transaction? What information do customers need to easily access? What are the pain points that trigger complaints?

Customers also want personalized service. With high customer service standards set by other industries such as retail, customers expect interactions with their insurer to be placed in the context of previous contact, rather than being treated as if this was their first interaction with the company.

Stored data can be used to pre-populate applications or renewals, and sales and support staff can make short work of answering queries by having all the information they need at their fingertips. With DataStax you get an always-on database that allows for real-time access to the data you need, when you need it.

### 2. De-silo Insurance Data

Customer experience can only be improved once you have a holistic view of all your customer data. Insurers are not only placing their customer data into silos, but they are also compartmentalizing risk management, which can have a major impact on the enterprise view of risk assessment.

The "Silo Factor" limits an organization's ability to see all of the data, thereby resulting in a very narrow view which inhibits management from identifying trends, risks, and data security threats facing the entire enterprise. Silos also reduce overall organizational efficiency, causing more labor and time for agents and customer service representatives to go to various systems to try and access a full picture of the customer they are servicing. This not only negatively impacts your revenue, it also frustrates customers.

Getting the most business value out of your data starts with shattering those data silos. Without the ability to access and analyze all of your data in a fluid manner, it becomes very difficult to deliver exemplary customer experiences and uncover what your customers truly want.

There's an easy fix: Simplify and consolidate your tech infrastructure to improve data accessibility. DataStax Enterprise (DSE), a multi-model NoSQL database designed for hybrid cloud, enables you to store data in the most appropriate format (e.g., graphs, documents, key-value, and JSON), across multiple geographies, and delivers access to all your data in real time.

### 3. Risk Assessment and Mitigation

Data improves risk management by helping to build risk models that deliver better visibility into the drivers of risk, which can then lead to more effective decision-making.

By using historical, continuous, and real-time data, in combination with other internal and external data sources, it's possible to construct a much more sophisticated picture of risk.

For the insurance industry, data can be used to develop insights into the types of risk for different lines of business, customers, or locations; the risks being written against national averages. These insights can be used to calculate the risk makeup of the portfolio, compare loss ratios by type, and help evaluate the effectiveness of risk mitigation measures.

A lot of useful data, such as that found in emails, documents, or social media, is unstructured and doesn't neatly fit the data architectures used by many computer databases. DataStax Enterprise, however, is engineered to help organizations make sense of all their unstructured data with a multi-model NoSQL methodology allowing you to store multiple types of data in one centralized database.

### 4. Fraud Mitigation and Prevention

Insurers need to stay compliant with ever-evolving regulations and continue to build their risk and fraud initiatives. Fraud for insurance companies is a major issue; an insurance industry coalition estimates it to be an \$80 billion-a-year problem. Fraud can be soft, where individuals take advantage of a situation to pay lower premiums or exaggerate claims, or hard, perpetrated by criminal gangs or repeat offending individuals. Either way, the frequency of attacks is increasing.

This key issue impacts both insurers and consumers with the cost of fraud being passed on, resulting in reduced earnings for insurance companies that continue to pay fraudulent claims. Outdated technology can't keep pace with the type and volume of fraud. Training people helps, and they remain an important part of fraud prevention, but effective modern fraud prevention combines the three Ts: team, technology, and tools.

Data management can help an insurer's investigation team detect abnormal behavior, calculate fraud propensity scores in real time as claims are processed, and look for patterns that suggest repeat or hard fraud. By matching variables in current claims against those in historic fraudulent claims, red or amber flags can be raised to signal more investigation.

DataStax helps you discover patterns and anomalies by comparing real-time transactions against historic behavioral and purchasing patterns—in time to eliminate risks.

### 5. Business Performance

Insurance companies should be evaluating their business performance regularly with a consistent cadence. When tracking along with performance at such high frequency it is important that insurers have visual display options that allow for easy trend identification and performance evolution. DSE Graph lets managers and organizational leadership measure key performance indicators such as performance by product and customer, salesperson profitability, bid-to-sale ratios, operational costs by function, team and location, and most profitable products all in a visually friendly display.

Graphically representing policies by line of business, product, and location can help find gaps in market reach, and heat maps can easily display customers who have problems.

## It's Time Insurance Companies Take Advantage of the Benefits of DataStax

In summary, for insurance companies, effective data management isn't an outcome itself—improving the top and bottom line is—but it's an important enabler for business improvement, and many companies are investing in the capability.

The two main barriers to effective data management are infrastructure constraints—not having the right technology—and data accessibility. Data is siloed, often in different locations and formats, and difficult to find.

DataStax Enterprise, a unified data layer of database, search, and analytics, is the only hybrid cloud data management layer that allows insurers to meet the contextual, always-on, real-time, distributed, and scalable requirements their industry demands.

DSE also provides a uniform security model across the entire data layer and includes advanced features such as unified authentication, authorization, profile access control, row-level access control, encryption, data auditing, and more to prevent unauthorized access.



#### **About DataStax**

DataStax delivers the always-on, active everywhere distributed hybrid cloud database built on Apache Cassandra™. The foundation for full data autonomy and personalized, real-time applications at scale, DataStax Enterprise makes it easy for enterprises to exploit hybrid and multi-cloud environments via a seamless data layer that eliminates the issues that typically come with deploying applications across multiple on-premises data centers and/or multiple public clouds.

Our product also gives businesses full data visibility, portability, and control, allowing them to retain strategic ownership of their most valuable asset in a hybrid/multi cloud world. We help many of the world's leading brands across industries transform their businesses through an enterprise data layer that eliminates data silos and cloud vendor lock-in while powering modern, mission-critical applications. For more information, visit [www.DataStax.com](http://www.DataStax.com) and follow us on Twitter @DataStax.

© 2019 DataStax, All Rights Reserved. DataStax, Titan, and TitanDB are registered trademarks of DataStax, Inc. and its subsidiaries in the United States and/or other countries.

Apache, Apache Cassandra, Cassandra, Apache Tomcat, Tomcat, Apache Lucene, Lucene, Apache Solr, Apache Hadoop, Hadoop, Apache Spark, Spark, Apache TinkerPop, TinkerPop, Apache Kafka, and Kafka are either registered trademarks or trademarks of the Apache Software Foundation or its subsidiaries in Canada, the United States, and/or other countries.