



CASE STUDY

Leveraging Big Data for Real-Time Insurance Underwriting

Just the Headlines

Short on time? Here are the key facts.

- An auto insurance client had a mobile application that was not equipped to consolidate and analyze the anticipated high-volume data sets they needed.
- 2nd Watch integrated and consolidated disparate systems, applications, and data sources into one comprehensive hub that enhanced overall reporting and delivered the data in a strategic manner.
- The solution provided the client with list reports and Power BI dashboards, and it supported machine learning projects for their data team. With our solution, this insurance client is able to leverage big data for real-time underwriting.

Industry

Insurance - Property and Casualty



The Challenge

Our industry-leading auto insurance client had just developed a game-changing application. Their idea? Provide ride-share drivers with quick and easy access to custom underwriting services, issuing four-hour micro-insurance policies that protected their customers' livelihood for mere cents per mile.

The only problem? Their mobile application was not equipped to consolidate and analyze the anticipated high-volume data sets. Without big data, they would miss out on the big picture – and opportunities to evolve their services and revenue.

Featured Technologies

Power BI
SQL Server

In search of the right solution for leveraging big data for real-time insurance underwriting, our client reached out to their trusted technology partner for direction. They chose 2nd Watch for our command of big data, data modeling, and the challenges of the insurance industry – especially policy underwriting, fraud detection, and customer interactions.

The Solution

Working directly with stakeholders on our insurance client's data integrity team, we outlined their vision and the full value of big data integration within their mobile application. Using experience cultivated over numerous insurance analytics projects, our team forecasted the immediate impact and the long-term scalability of the project. Then, the 2nd Watch delivery team plunged into the technical work we do best.

The Microsoft stack emerged as the superior tool set for this solution. We parsed the JSON using SQLServer native capability and loaded the data into a star schema data warehouse. This simplified query writing and database processing, resulting in nimble user access and analysis. Then, we built an SSAS tabular model to yield fast and more effective reporting through a highly accessible user interface.

During the development process, the 2nd Watch team integrated and consolidated disparate systems, applications, and data sources from 20 divisions of the insurance client into one comprehensive hub, enhancing overall reporting. Though it required a fair amount of reverse-engineering, our hard work paid off in a seamless solution that delivered data in a strategic manner.

Our team even contributed to user acceptance testing, validating that the initial user requirements fulfilled the needs of a real-world user base.

The Outcome

Since the launch, our solution has provided our client's data integrity team with rich and comprehensive reporting that pulls from a variety of data types and sources. Policy specifics, driving conditions, driver ride sharing scores, user interactions with the app, and other data now fuel everything from list reports and Power BI dashboards to machine learning projects pushing the cutting-edge of predictive analytics.

This project was just the beginning for 2nd Watch and this insurance client. The 2nd Watch team continued to support the data warehouse and reporting functions, migrate existing applications into the data warehouse, and expand the use of big data analytics throughout the enterprise.