ACCELERATING THE EVOLUTION OF DIGITAL CLAIMS

Using Data and AI to Drive Touchless Claims Processing

Insurance customers today expect a digital, high-quality customer experience when entering a claim. The overall increase in digital interactions, and the increased competition from non-traditional competition including BigTech and Insurtech is driving the need for insurance companies to rethink their claims operations. Enhancing the use of data, advanced analytics, machine learning and artificial intelligence are critical tools to enable end-to-to end digital claims.

5.5

Submission of fully digital claims reduced the average time to payment by up to 5.5 days.[3]

Customer Expectations

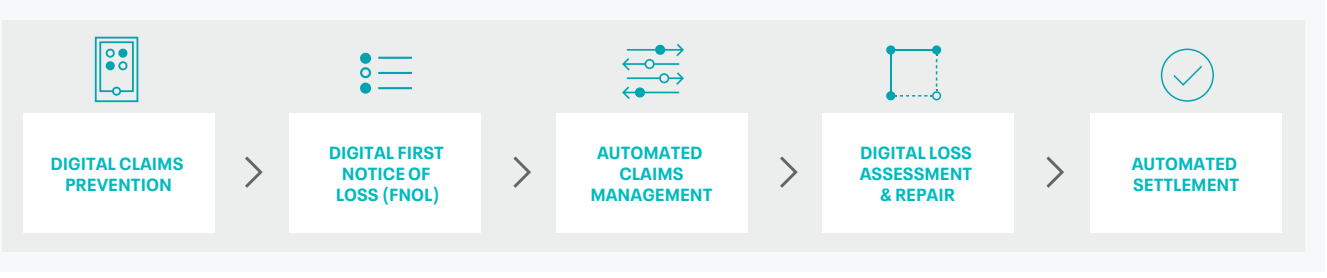
As insurers have known since their inception, claims handling is the most critical aspect of customer service. A recent report by Deloitte[1] emphasizes that "a main driver for customer retention and loyalty comes from the interaction customers have with their insurers, specifically the claims experience." A claims interaction for the insured is an infrequent interaction that places a spotlight on the provider's servicing capability. With the expectation for touchless interactions, a digital claims resolution process is critical.

Celent[2] highlights data analytics and AI as a top imperative for 2021 sighting touchless claims executed in 5-10 minutes as an example of what could be realized. While this may be ambitious, using advanced technologies is making this more of a reality. J.D. Power[3] found the "submission of fully digital claims reduced the average time to payment by up to 5.5 days and helped drive the highest overall satisfaction scores ever measured in the study's 14-year history." The study found that "that customer adoption of digital claims reporting, estimation and, most importantly, insurers' use of photos/videos for estimation increased during 2020."

New technology and the increased use of data enables insurers to improve the critically important claims experience. And while a fully digital claims cycle helps to improve customer loyalty, it also offers additional benefits to reduce costs and manage fraud throughout the processing cycle.

Enabling Digital Claims End-to-End

At each step in the claims workflow there exists the opportunity for automation, improved efficiency and an enhanced customer experience for the insured. The below illustration represents a typical claims processing workflow and highlights opportunities for automation using enhanced data sources, analytics and AI.



Octo Telematics has transformed how insurers assess risk, deliver crash and claim services, and manage customer relationships with the ability to analyze 11 billion data points daily from five million connected cars. The technology can help reduce the time to manage the entire claim process from weeks to one hour. This includes analyzing liability, assessing damages, and steering the car to a repair shop. Learn more.

1. **Claims Prevention**—The first step in improving the efficiency of claims processing—avoid the claim. Insurers are looking for more capabilities to assist in prevention of claims in both the P&C (General) and Health/Life segments. The increased usage of IOT sensors combined with AI enable insurers to assist in prevention. Examples include sensors tracking workers in industrial or manufacturing workplaces to monitor their location and ensure their safety. Smart devices such as refrigerators and pipeline sensors proactively warn users of potential upcoming damages, for example by measuring water pressure, flow, or temperature. Telematics within cars can track driving behavior and reward safe drivers. Geolocation can complement the behavior by recognizing driving locations that are considered safer. In health examples, sensors can be used to track insulin or heart rate levels and alert individuals to act when needed. In an ideal scenario, these capabilities avoid a claim altogether, or at least minimize the claims event and its impact.

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of the top 15
global insurance companies
run on Cloudera

Proven Data Leadership in Insurance

Insurance Companies globally run on Cloudera to support their data and analytics strategies including:

- 80% of the top ten North American P&C Insurance Companies
- 33 of the top 50 Global Life/Annuity and Health Insurance Companies
- 64 of the top 100 Global Insurers

Why Cloudera

Cloudera Data Platform enables insurance providers to effectively execute their data and analytics strategy to address current and evolving customer expectations.

EDGE TO AI ANALYTICS
All the functions needed to collect, transform, query, optimize, and make predictions from data are integrated, eliminating the need for costly point products.

DATA SECURITY & COMPLIANCE
Maintains strict enterprise data security, governance, and control across all environments.

HYBRID AND MULTI-CLOUD
Delivers the same data management capabilities across data centers, private, and public clouds.

100% OPEN SOURCE
Open compute and open storage ensures zero vendor lock-in and maximum interoperability.

2. **First Notice of Loss**—The initial logging of a claim can be a sensitive, stressful event where customer experience and efficiency are critically important. Advancements by insurers to facilitate this step include predicting claim events based on the IOT data captured and initiating the claim process on behalf of the client. Chatbots can expedite the initial notice by gathering critical data in an efficient format. Machine learning and AI can facilitate processing time predictions for customers to offer a superior level of customer care. Pictures, video and voice recordings support an easier FNOL process without the historical large amount of administrative tasks the customer previously had to undertake after or during a stressful event.
3. **Claims Management**—This step focuses on the efficiency of internal operations in processing the claim. P&C (General) and Health/Life segments have varying levels of complexity across the claims received. Insurers can apply modeled historical data, contextual information and advanced analytics to help assess the characteristics of a claim and categorize them by complexity. Establishing workstreams for varied cases expedites processing where possible and better applies human expertise where human intervention is truly needed.
4. **Loss Assessment**—Insurers can improve the accuracy and consistency of scrutinizing claims, while increasing the speed of assessment. Automated damage valuation for P&C claims based on a photo or sensor data enables comparison to similar cases. Health and bodily injury claims can be assessed automatically against similar invoices of related activities (lab tests, x-rays, etc.) using machine learning. The characteristics of the claim can automatically determine the routing to the appropriate claims assessor.
5. **Settlement**—The final stage to conclude the workflow is settlement. To drive efficiency at this step, AI could be used to perform real-time invoice analysis for potential corrections based on past invoices. This is also a stage where automated subrogation and salvage opportunities could be initiated as an additional sub-workflow of the claim.

Leverage the Data—Old and New

The effort to deliver a touchless claim end-to-end with a positive experience for the insured across a large base of customers is a major undertaking for insurance providers. While there is ample data and technology available to drive such a program, it is a complex challenge.

Longstanding insurance organizations have the familiar challenges of data silos and sensitive data that create challenges in advancing digital transformation.

DATA SILOS	DATA PRIVACY
Data resides in silos—policy management systems, claims, brokers, etc. all have critical data. Much of it is stored in multiple repositories across business lines. Often the data lives in a legacy mainframe environment, which can make it difficult to access and utilize effectively.	Sensitive data proliferates in the insurance arena, and companies must be thoughtful about privacy and bias as they seek to introduce automation and self-service options.

At the same time, new data sets are available and advanced technologies enable insights to be gained from this information.

UNSTRUCTURED AND REAL-TIME DATA—IOT, MOBILE, SOCIAL MEDIA	ADVANCED ANALYTICS, MACHINE LEARNING, AI
To enable proactive, preventive advice, insurers must incorporate data from unstructured sources (images, text, handwritten notes) and new/ emerging sources such as geolocation, weather, drones, social media streams and alternative data from external sources.	As data volumes multiply, traditional techniques of rules-based analytics are becoming more challenging. Advanced analytics, machine learning and AI are proving effective in processing and analyzing vast quantities of data.

CZ Group

CZ Group is driving best-in-class customer service in health insurance through modern analytics. They removed silos across the business, for improved decision making. This led to faster and more effective customer service and more accurate business forecasting.

Learn more about CZ Group's success with Cloudera.

To advance their claims digitalization initiatives, insurance providers need to evolve the operation to leverage the data available within the enterprise already and append it with new data sources. They need an enterprise data governance approach to drive efficiency and navigate the evolving privacy law landscape.

An Enterprise Data and Analytics Platform

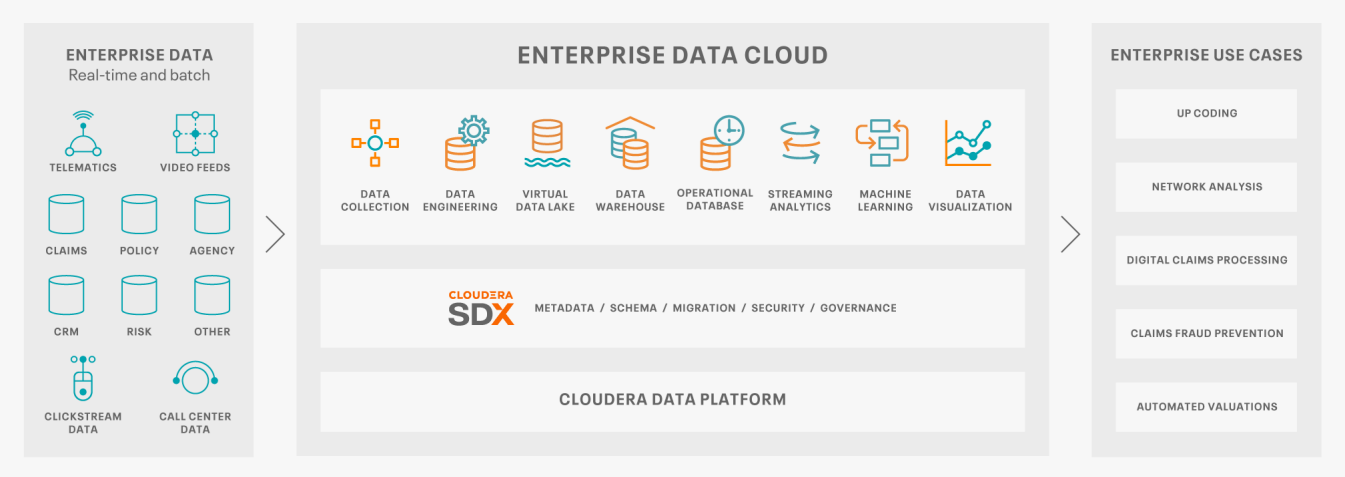
Given the complexity and variety of traditional and newer sources of data, insurance providers are reinventing their data management and analytics strategy—transitioning to a multi-function open platform that is optimized for the massive scale and security of the data that the industry demands.

Insurance carriers need the ability to collect, process, store, analyze, and model various types of data. This could mean large quantities of historical data and increasing volumes from increased digital interactions. They need to enable scalability while maintaining strict data privacy, lineage, security and governance.

End-to-end Insurance Data Management with Cloudera

Today, leading insurance providers worldwide are adopting an enterprise data cloud strategy using the Cloudera Data Platform (CDP) to manage the end-to-end data journey, taking in raw data at the source, to drive actionable insights and enhance the their digital transformation by implementing a suite of compelling use cases.

CDP is an enterprise data platform, offering a full range of analytic capabilities from the Edge to AI. CDP delivers powerful self-service analytics across hybrid and multi-cloud environments, along with sophisticated and granular security and governance policies that IT and data leaders can trust. It's built 100% on open source to more easily enable integration with existing application investments.



With CDP, insurance organizations can collect data from multiple sources, including high volumes of real-time and batch data. This includes newer data sources such as photos, images, and weather and sensor data. This complements enterprise data sources (policy, claims, CRM, call center systems) to facilitate comprehensive claims analysis and assessment throughout the workflow.

This varied data is then available to create and execute end-to-end data pipelines. Depending on the business needs, organizations can report against and analyze data in a variety of ways including — interactive SQL, text search, integration with leading BI and visualization tools, or perform advanced analytics, machine learning and AI.

CDP serves traditional structured data alongside new unstructured data ensuring the latest data and analysis can be injected into decision making. To close the loop on the data lifecycle, machine learning is used to predict and drive key business insights that can be actioned such as automation of a claim settlement or alerting a fraud analyst to a suspect claim submission.

SDX Enables Common Security, Governance and Compliance

Cloudera's SDX (Shared Data Experience) enables safe and compliant self-service access to data and analytics, offering deeper insights from data with increased agility, at lower cost and with reduced risk. Users can set data and metadata security and governance policies once, and SDX will automatically enforce them across data and analytics in hybrid as well as multi-clouds.

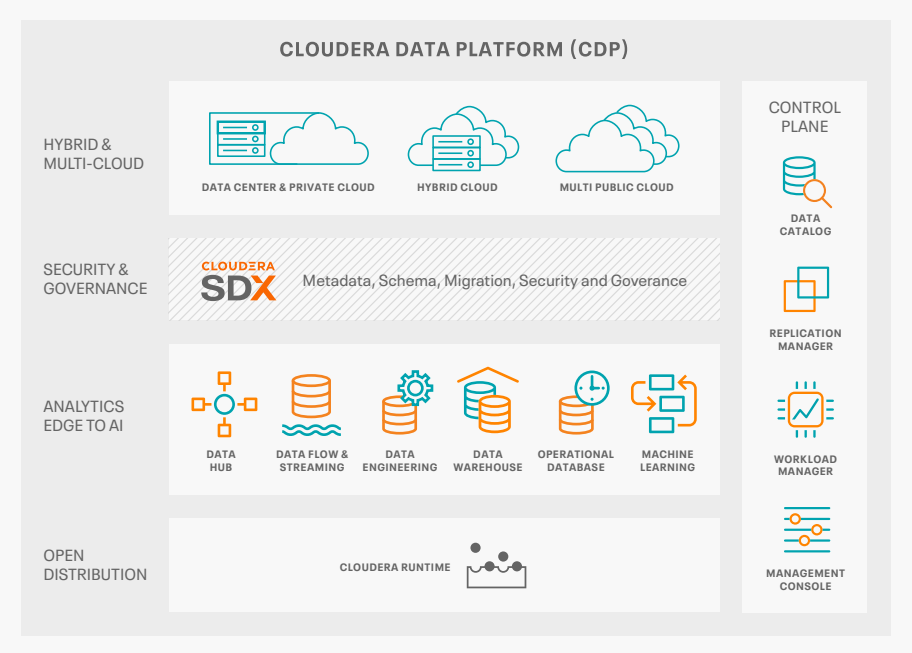
This helps insurers achieve and maintain regulatory compliance. A modern data platform decreases business risks, offering consistent security and governance across all data and environments.

About Cloudera

At Cloudera, we believe that data can make what is impossible today, possible tomorrow. We empower people to transform complex data into clear and actionable insights. Cloudera delivers an enterprise data cloud for any data, anywhere, from the Edge to AI. Powered by the relentless innovation of the open source community, Cloudera advances digital transformation for the world's largest enterprises.

Learn more at cloudera.com.

This is done while maintaining strict enterprise data security, governance, and audit trails across on-premise and cloud hybrid environments. CDP facilitates data lineage, audit trails and sensitive data compliance, mandatory for regulated organizations.



Enhance Efficiency and Improve Customer Experience

A data and analytics-driven approach to evolving the claims process empowers insurance providers to enable a superior customer service while increasing operational efficiency.

Cloudera Data Platform offers the tools to help insurance carriers embrace both the present opportunity around data, as well as the emerging sources of new information, all toward the goals of a more responsive claims resolution process and an improved customer experience.

Learn more about the Cloudera Data Platform and how Cloudera is transforming Insurance.

Sources:

1 Deloitte, Future of Claims, August 2020

2 Celent, Top Technology Priorities for P&C Insurers in 2021

3 Businesswire.com/news, Feb 2021

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