



APPLICATION NOTE

# Becoming a Customer-Centric, Digital-First Insurer with In-Memory Computing

Insurers have undergone massive changes. Over the last 5-10 years, digital business has transformed how insurers interact with their customers. This is true both for customer acquisition – from marketing to online quoting and onboarding – as well as claims submission and processing.

But the change has only just begun. Over the next 5-10 years, experts expect even more digital transformation and disruption ahead. In one study by PwC, nearly half of all insurance CEOs surveyed believe that most existing insurers will not survive in their current form. Close to 80% expect the players to change substantially. These CEOs emphasized that the driving forces of change are technological change and customer expectations for anytime, anywhere service.

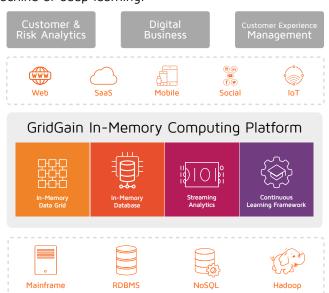
Being a fast follower or late adopter may have been good enough in the past. But now, to maximize their chances of surviving and thriving, insurers must not only fulfill the latest regulatory requirements. They must also be the first to innovate in three areas:

- Customer and Risk Analytics: Improve their understanding of their customers and associated risk
- Customer Experience Management: Understand and continuously improve their end-to-end customer experience
- Digital Business: Develop the people, processes and technology to be digital innovators and first to market

# IN-MEMORY COMPUTING AS A FOUNDATION

In-memory computing has been a critical technology across these three areas. It helps deliver a real-time, anytime, anywhere customer experience. It not only provides the performance and scalability needed to support digital channels and increased self-service. It also enables real-time customer analytics, risk assessment and pricing, and makes them all an integral part of the real-time experience. In-memory computing enables companies to tailor the experience for each customer during each interaction and transaction. It allows companies to use real-time analytics and decision automation to react when needed and improve the experience. Gartner calls this approach hybrid transactional/analytical processing (HTAP). The foundation for HTAP is in-memory computing.

GridGain is the leading in-memory computing platform for real-time business. It is built on Apache® Ignite™, one of the top five Apache open source projects. GridGain Systems contributed the code that became Ignite to the Apache Software Foundation and continues to be a leading contributor to the project. Thousands of companies worldwide rely on GridGain and Apache Ignite to add in-memory speed and unlimited horizontal scalability to new or existing OLTP or OLAP applications, HTAP applications, streaming analytics use cases, or continuous learning use cases involving machine or deep learning.



GridGain and Apache Ignite are deployed by leading financial services, insurance and healthcare companies for real-time risk assessment, customer analytics and regulatory compliance; for new digital business initiatives, and to improve the customer experience.

# CUSTOMER AND RISK ANALYTICS AND REGULATORY COMPLIANCE

GridGain is a proven foundation for real-time customer and risk analytics and regulatory compliance. Leading banks, investment management and fintech companies rely on GridGain for real-time analytics and regulatory compliance

across trillions of dollars of assets and hundreds of millions of consumers globally. Examples include real-time:

- Risk assessment by overall portfolio and customer as well as asset or contract pricing for digital channels. It's used to calculate individual and company-wide liability in real-time for thousands of trades and contracts per second
- Monitoring and alerting of customer onboarding, sales and support processes
- Cybersecurity and fraud prevention as well as reporting and auditing with full audit trails
- Regulatory compliance such as Basel compliance with intra-day stress testing and liquidity management

#### **DIGITAL BUSINESS**

As a consumer, you may be using GridGain online. It is deployed by many innovators across financial services, insurance, fintech, retail, healthcare, transportation and logistics, and SaaS companies. These companies rely on GridGain for the performance, scalability, real-time analytics and decision automation needed to deliver a great digital experience to millions of customers globally across Web and mobile channels, and APIs. Real-time uses include self-service, risk and liability calculations; dynamic pricing for assets or contracts; and business process monitoring and management.

One global banking and insurance company used GridGain to open up internal legacy systems to consumers and 3rd parties to deliver new services and handle regulatory requirements. The company was able to cut the end-to-end latency across digital channels to less than 100ms and sup-

port 7x the load from new mobile customers. Perhaps more importantly, they were also able to be the first to market with new services and meet PSD2 regulatory requirements.

#### CUSTOMER EXPERIENCE MANAGEMENT

It is no longer enough to just add new channels or be faster. Customers expect a better end-to-end experience. This requires insurers to adopt new technologies that help improve end-to-end visibility during each interaction and automate decisions that improve customer satisfaction and business outcomes. GridGain's broad support for Apache Spark and other streaming technologies enables users to rapidly consume and make sense of new streaming data about customers, operations and the Internet of Things (IoT). By using

GridGain's in-memory computing capabilities, companies have been able to deliver new in-process HTAP applications that help identify important events and automate responses. Uses include real-time visibility into customers, real-time personalization and pricing, and processing monitoring and alerting. One company relies on GridGain to deliver a personalized experience with nearly 500,000 pricing calculations per second during peak load times. Companies can also use the built-in GridGain Continuous Learning Framework for machine and deep learning to automate decisions and improve outcomes. The Framework provides the ability to continuously re-train and improve models in real-time using the latest operational data.

#### Learn More

Introducing the GridGain In-Memory Computing Platform

## Contact GridGain Systems

To learn more about how GridGain can help your business, please email our sales team at <a href="mailto:sales@gridgain.com">sales@gridgain.com</a>, call us at +1 (650) 241-2281 (US) or +44 (0)208 610 0666 (Europe), or complete the <a href="mailto:contact form at www.gridgain.com/contact">contact form at www.gridgain.com/contact</a> and we will contact you.

### About GridGain Systems

GridGain Systems is revolutionizing real-time data access and processing with the GridGain in-memory computing platform built on Apache® Ignite™. GridGain and Apache Ignite are used by tens of thousands of global enterprises in financial services, fintech, software, e-commerce, retail, online business services, healthcare, telecom and other major sectors, with a client list that includes ING, Raymond James, American Express, Societe Generale, Finastra, IHS Markit, ServiceNow, Marketo, RingCentral, American Airlines, Agilent, and UnitedHealthcare. GridGain delivers unprecedented speed and massive scalability to both legacy and greenfield applications. Deployed on a distributed cluster of commodity servers, GridGain software can reside between the application and data layers (RDBMS, NoSQL and Apache® Hadoop®), requiring no rip-and-replace of the existing databases, or it can be deployed as an in-memory transactional SQL database. GridGain is the most comprehensive in-memory computing platform for high-volume ACID transactions, real-time analytics, web-scale applications, continuous learning and hybrid transactional/analytical processing (HTAP). For more information on GridGain products and services, visit www.gridgain.com.

© 2019 GridGain Systems. All rights reserved. This document is provided "as is". Information and views expressed in this document, including URL and other web site references, may change without notice. This document does not provide you with any legal rights to any intellectual property in any GridGain product. You may copy and use this document for your internal reference purposes. GridGain is a trademark or registered trademark of GridGain Systems, Inc. Apache Ignite, Ignite and the Apache Ignite logo are either registered trademarks or trademarks or the Apache Software Foundation in the United States and/or other countries. All other trademarks and trade names are the property of their respective owners and used here for identification purposes only.