



Enabling Customer 360 Insights

Percipient and Intel design a solution for Future Generali's customer support service team to deliver great customer experiences through a single view of the customer across all touchpoints

Executive Summary

In today's insurance marketplace, insurance companies are looking for features that set them apart. Consumers are expecting more personalized products coupled with a high level of customer service.

Future Generali, one of India's leading insurance companies, handles a huge number of customer calls daily through their customer support service. With the number constantly increasing, the need to deliver 24/7 service for a consistent and valuable customer experience is critical to its success.

However, in order to provide a smooth customer experience, it is necessary to have a holistic 360 degree view of the customer, so that each interaction becomes an opportunity to delight and comes across as a value-add to the customer. Intel and Percipient joined hands to facilitate Future Generali with a Proof of Concept (PoC) so that the insurer could provide its ever-increasing customer base a seamless and highly personalized engagement.

The Need to Adapt to Growing Needs

Future Generali is committed to providing best-in-class services to its valued customers, and understands the importance of being customer-centric and creating effective customer experiences. The Company has sourced over 11,00,000 policies since inception, and today insures over 450 marquee corporates in India and globally¹.

Future Generali prides itself in delivering world-class support service for their products and connect with customers through their call centers and more than 8,000 advisors across the country¹. But over the years, Future Generali has accumulated a large amount of disparate customer data. This opened up a big challenge for their customer support teams, such that, the teams did not have access to one single view of all the data available, which hampered the teams' efficiency and productivity.

This key challenge along with the rapidly growing number of customers and the need to meet the ever-changing requirements of customers have made the Company realize the importance of driving more efficient and productive customer support teams.

Challenges of Disparate Data

Today's customers use multiple channels, such as web, mobile apps, IVR, BoTs as well as Social Media to connect with customer support teams. With the huge number of products and volume of transactions and locations, customer interactions have become increasingly complex to handle efficiently. Data silos are pervasive, increasing the need to consolidate, integrate, and analyze information in a cost-effective and timely manner. As a result, only a fraction of the data available is accessed most of the time, limiting potential insights that can be gained to deliver a better customer experience.

Future Generali's current customer support service model relies on a system that extracts data from multiple sources and with no access to one single view of the customer data. This posed a lot of challenges for their customer support teams. A customer support executive had to access the customer data from different sources and systems during a customer call. This process is incredibly time consuming and often slows the process of responding to customers specially in cases where customers have given their valuable feedback under the Company's Net Promoter Score program.



“ The Percipient solution, powered by Intel® processors, enabled Future Generali in implementing a 360° customer view system for our customer support teams, which resulted in enhanced efficiency, better productivity, and better customer engagement and satisfaction level. ”

Byju Joseph

Executive Vice President,
Information Technology,
Future Generali



It is difficult to combine the different sources of data, and it is also prone to error. To make matters worse, the information may be practically of no use by the time it is accessed. This can result in reduced call effectiveness and customer satisfaction level, in most of the cases.

Delivering a 360° Solution

Future Generali wanted to enhance their customer support service by providing their support teams with centralized access to customer data in real time during customer calls. To realize this, it needed a system that could capture data from numerous disparate sources available – Policy Database, Customer Database, Email Database, and other sources – and then provide a single view of all these different sources.

To meet these needs, Future Generali chose to try Percipient's in-memory data unification platform, UniConnect*, which by leveraging Intel® technology, is able to provide a true 360 degree view with seamless data integration across multiple systems. Built on a selection of open source in-memory, Hadoop* and distributed processing technologies, UniConnect provides a customized platform that enables the on-demand merger of disparate structured, unstructured and semi-structured data sources without needing to stage the data. Hadoop stores everything in a schema-less structure, enabling Future Generali's infrastructure to flexibly carve up a record or an output from whatever combination of inputs the customer support executive wants, and delivers results on demand. UniConnect unifies data from Microsoft SQL Server*, IBM DB2* and emails which is then used to paint a customer 360 view on a customer support executive's screen before speaking to the customer who has logged in through Future Generali's IVR (Interactive Voice Recognition).

The POC deployment was done with two main hardware components– UniConnect platform, and the Spark* Big Data platform. The UniConnect platform consisted of three Ubuntu* servers powered by Intel on a 64 GB RAM and 200 GB Storage environment, while the Spark Big Data Platform consists of two Ubuntu servers powered by Intel on a 64 GB RAM and 200 GB Storage environment.

For the trial, four data sources were leveraged. The first data source consists of 8-10 policy transaction tables in AS 400 DB2*, some with around 50 million rows. The second data source contains customer details on Microsoft SQL Server.

The third data source includes an email server with PST format. The last data source contains real-time tweets. To extract maximum performance out of the sources, the unified and filtered data was integrated into a Hive* table. The Hadoop (Hive) platform can also be used as a mini warehouse for analytics.

Intel® Technologies for Advanced Capabilities

What brings this platform to life is the performance of the Intel® Xeon® processors. The UniConnect and Intel® Xeon® combination was able to deliver a real-time capability in processing Future Generali's diverse sources of customer and policy data.

The combination of Percipient's UniConnect, Intel® architecture and Hadoop delivered a faster, more efficient and less costly data storage and processing infrastructure for Future Generali.

To enhance efficiency, the finalized solution needs to support advanced capabilities such as compression, encryption, automated tiering of data, data deduplication, erasure coding, and thin provisioning—all of which are supported with the Intel® Xeon® processor E5 family, which also provides a solid, high-performance foundation for Apache Hadoop clusters.

Intel® Xeon® processors include security features like Intel® Advanced Encryption Standard New Instructions (Intel® AES-NI) to boost cryptography performance, thereby allowing more data to be securely stored, transmitted, and analyzed.

Also key to UniConnect's virtualization capabilities is the availability of high-performance, low-latency RAM, sophisticated compute and advanced caching capabilities – all offered by the Intel® Xeon® processor family.

Achieving Enhanced Benefits

By utilizing the full breadth and depth of available data, this solution helps Future Generali to deliver experiences that are more closely aligned with the needs and expectations of the customer support team to close the loop with customers in real time. The solution solves the challenges of incorporating multiple data sources into customer insights that help personalize the customer experience and can result in a strong competitive advantage.

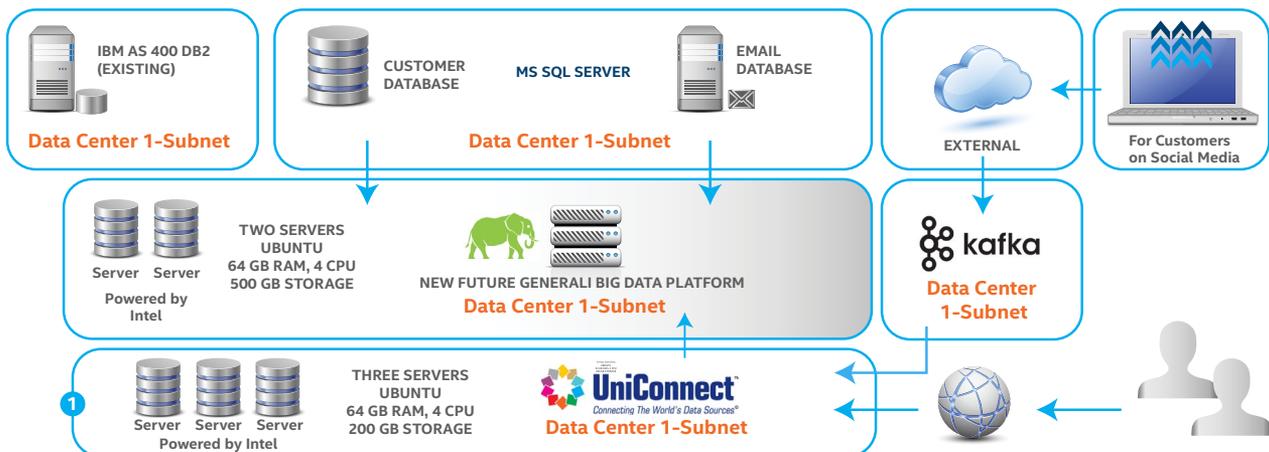


Figure 1: Solution Architecture

The benefits delivered by the solution for Future Generali include:

- **Less Resource Intensive:** Bringing down resources and training costs with the use of simple SQL
- **Reduced Storage Costs:** In-memory processing eliminates the need to store multiple copies
- **Single Window View:** One tool for all connections and queries to help the customer service executive to resolve all NPS related feedback.
- **Real-Time Results:** Faster processing enabling customer view in real time
- **Secure Environment:** No data duplication - eliminating the need for additional security measures to maintain privacy and access
- **Real-Time Integration:** Real-time ingestion of data from any source with the integrated Kafka* platform
- **Cost Effective:** All existing systems are preserved with no disruption of legacy systems and cost is agnostic to the growth in data volumes
- **Enhanced Customer Experience:** Efficient and personalized customer service helps build customer loyalty and improve retention

Realizing Maximum Impact

The data unification POC using the UniConnect platform powered by Intel® architecture was successful in achieving a single view of the customer across several disparate databases. Driven by the successful implementation of this PoC, Future Generali is leveraging this solution as a full-scale deployment for life and general insurance. With this solution, Future Generali aims to empower their customer support teams in call center locations across the country.

Apart from the efficiency and productivity advantage, Future Generali stands to benefit by up to a 20% reduction in Extract-Load-Transform (ETL) resourcing². Furthermore, by ensuring that the data is stored on a cost-efficient Hive platform and regularly-refreshed, this up-to-date single customer view is available to other relevant business teams.



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Intel® processors and platforms were key in helping us deliver a solution that enables real-time capability for processing Future Generali's diverse resource of customer data, and the performance to help accelerate the ever-increasing volumes of data.”

Ravi Shankar Nair
Chief Technology Officer,
Percipient Partners Pte. Ltd.



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¹<https://life.futuregeneral.in/media/391338/company-profile-november-2016.pdf>

²Based on Percipient's internal testing data.

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