CASE STUDY

DATA MASKING SOLUTION LOWERS RISK AND REDUCES COSTS FOR A LEADING GLOBAL INSURER

Abstract
Infosys partnered with a leading global life insurance company to execute a complex data masking program covering sensitive data in non-production environments. Infosys implemented the Data Masking solution across 360+ applications, with a base of over 160 million customers. This program helped reduce the risk of exposing sensitive data considerably, in line with customer commitments and expectations. It resulted in a 50% reduction in data masking execution costs along with huge savings on infrastructure costs. It also resulted in a faster turnaround with 12 times reduction in process and cycle time.
Business Context / Problem

Over the past decade, increased risks in handling sensitive customer data by technical users and looming security threats from hackers had outpaced the insurer’s ability to keep up with stringent regulatory requirements. As per industry research, on an average, a single data breach is observed to cost institutions a staggering US$6.75 million. To mitigate such huge risks and ensure compliance, the client initially made an attempt to use the Data Masking solution but put it on hold. In 2011, the client partnered with Infosys to revisit this problem and decided to re-establish the risk mitigation program leveraging the new partnership.

Client Details

Based in the United States, the client is a leading provider of insurance, annuities and employee benefit programs, serving millions of customers worldwide. The client also holds leading market positions in Japan, Latin America, Asia Pacific, Europe, and the Middle East.
Infosys Solution

The Infosys program involved masking of sensitive data in non-production environments. It was a complex undertaking, where the risk exposure for over 3,000 enterprise applications was analysed. Infosys then implemented the Data Masking solution for the shortlisted 360+ applications, with a base of over 160 million customers.

The solution needed to fulfil a range of key objectives, including compliance with end-customer requirements on protecting data covered under non-disclosure agreements; meeting regulatory requirements; delivering a standardized, cost-efficient solution by centralizing data masking; and managing risk exposure and audit compliance. The client was also looking to set up data masking as a global shared service, enabling a standardized implementation of data privacy requirements and driving cost efficiency by leveraging the expertise, service, and process across multiple business areas.

To achieve this, Infosys brought to bear its considerable technical and domain expertise. IBM OPTIM was the client’s choice of tool for executing data masking. The skills and experience Infosys brought to the table enabled it to overcome several challenges related to customizing the IBM OPTIM to suit the client’s complex set of masking requirements. Major customizations were required to adapt to the client’s vast and intricate technology landscape, and specialized masking routines were designed and built. Moreover, data adapters needed to interface with different types of databases and customized solutions had to be compatible with different platforms.

During the process, Infosys leveraged their consulting alliance partnership with IBM to effectively resolve the technical challenges.

Factory Model and Processes

The Infosys data masking framework involved defining an over-arching governance model and robust new processes. This would engage the data masking initiative at an enterprise level and business-as-usual processes to handle projects and any enhancements-/ support-related activities. In agreement with the client, Infosys adopted a factory model with a well-established application life cycle process ensuring reusability, quicker onboarding, and improved acceptability of the processes. A well-defined self-audit process was also established to enable and tighten the risk compliance process.

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Challenges Encountered

Infosys faced several technical and operational challenges in the implementation of this complex data masking solution. There were technical challenges related to the complex technology landscape (Mainframes, SQL Server, Oracle, DB2, flat files, XML files), production data quality, data consistency, and the huge volume of data involved.

Operational challenges with regards to work efficiency, resistance to change, limited availability of applications, and resources also proved to be major obstacles. Our vast knowledge and expertise in the data masking space helped overcome these problems and we were able to add immense strategic value to the program.

Benefits Delivered

The proof of Infosys’ success can be seen in these numbers: The program coverage till date includes 100+ applications, 6000+ tables, and 10,000+ sensitive data columns, successfully masked across multiple non-production environments. This has ensured several benefits for the client even as they have considerably reduced the risk of exposing sensitive data in line with customer commitments and expectations. The effort has resulted in a 50% reduction in data masking execution costs along with huge savings on infrastructure costs and a faster turnaround with 12 times reduction in process and cycle time.

Infosys received excellent feedback from teams across the enterprise owing to the consistent delivery of applications and adherence to tight schedule, budget, and quality requirements. Due to its overwhelming success in its very first year, the program has been recognized by the client as a ‘model program.’