

# Transforming Surveillance and Investigations in Capital Markets

## CASE STUDY



### About Client

A leading exchange



### Industry

Capital markets



### Service

Data & Analytics



## Business **Need**

Our client, one of the world's leading exchanges, required the development of a robust data warehouse to serve the needs of its surveillance and investigation department. This data warehouse aimed to support reporting and visualization requirements for the following key objectives:

- ▶ Proactive market regulation
- ▶ Detection of improper trading practices
- ▶ Development of strategies to mitigate risks associated with trading malpractices

## Business **Challenge**

The primary challenge lay in processing billions of records to ensure regulatory compliance and enable effective investigations and surveillance. Complex compliance, investigation, and

surveillance requirements necessitated the correlation of data across multiple silos. Furthermore, the volume of data involved required robust data discovery and analytics capabilities.

# Business **Solution**

NSEIT undertook the development of a comprehensive data warehouse to address exchange's surveillance and investigation department's needs. This initiative involved the consolidation of data from diverse source systems within the data warehouse, where billions of records were meticulously processed. Key solution highlights included:

Correlation of data from multiple sources, enabling the association of data across silos.



Implementation of smart search capabilities for data discovery and data lineage, facilitating the identification of trading members with maximum margin shortfalls



Provision of business alerts for potentially problematic scenarios and the definition of KPIs for key stakeholders to assess the compliance of Trading Members and clients

1

Establishment of a regulatory data warehouse



2

3

Introduction of self-service and NLP-based ad-hoc exploration capabilities



4

5

Facilitation of ease of decision-making through Associative analytics and AI-driven insights



## Tech **Stack**

ORACLE



QlikView

# Business Impact

Following the implementation of the regulatory data warehouse, Exchange's Surveillance and Investigation departments successfully achieved their objectives of proactive market regulation, detection of improper trading practices, and the development of strategies to mitigate risks associated with trading malpractices. The other benefits that were delivered were:

Development of 30+ Qlik Applications



Improved service to over 1000 business users



Significant efforts savings of approximately 70-75% in generating critical business reports



Reduction of report execution time from 3 to 4 hours to just 20 minutes



Enhanced user adoption due to improved efficiency



Timely report generation, enhancing decision-making capabilities



## About NSEIT

NSEIT Limited is a digital native technology company that engineers world-class solutions to help our global customers accelerate their digital transformation journeys. Our key service pillars are Application Modernization, Business Transformation, Data Analytics, Infrastructure &

Cloud Services, and Cybersecurity, through which we create intuitive digital experiences and tangible business impact. For over two decades, our innate drive for excellence has made us the partner of choice for global organizations. At NSEIT, we fuel digital progress.

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