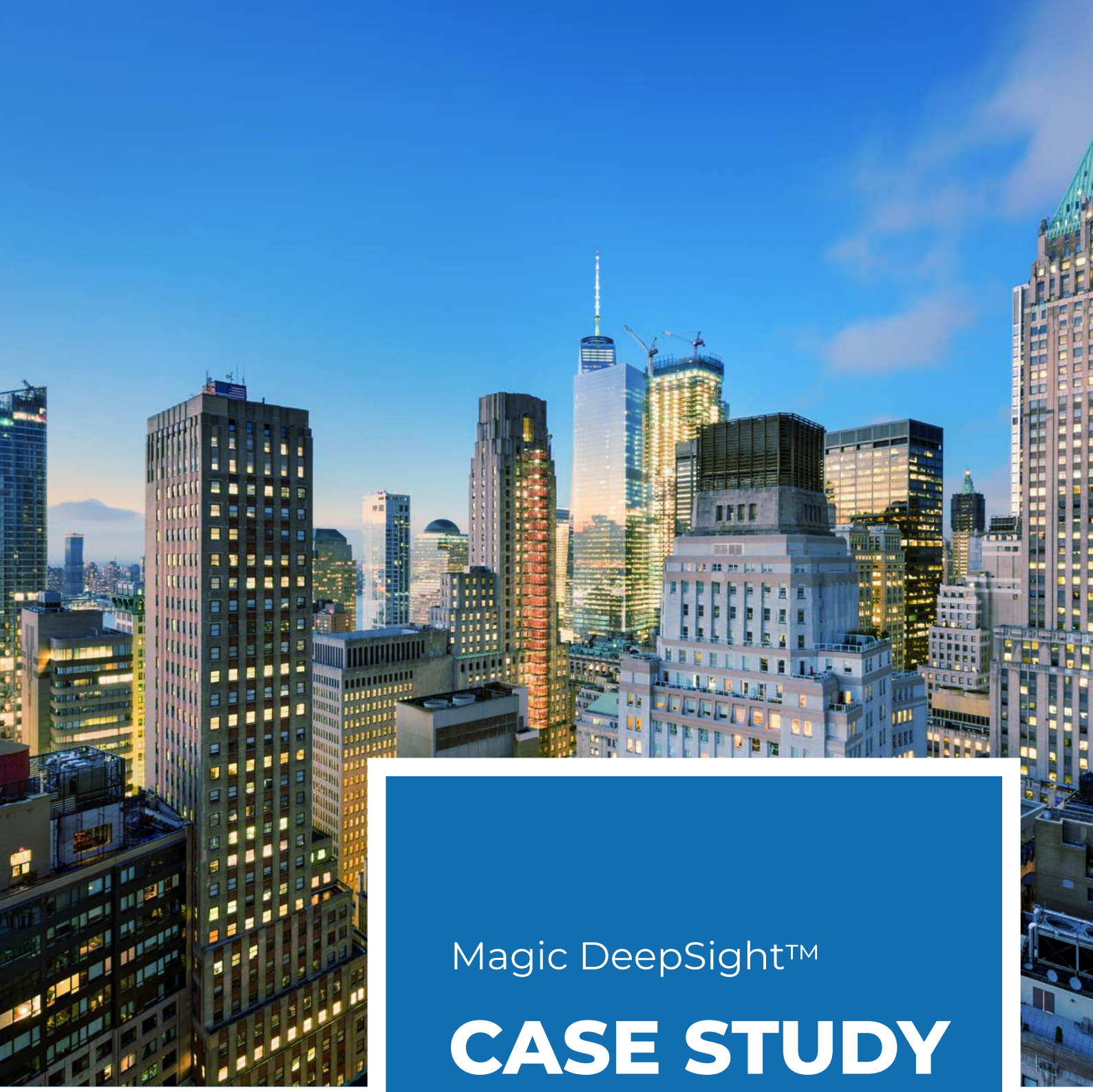

Magic DeepSight™

CASE STUDY

MagicFinServ
DRIVING BUSINESS IMPACT FROM INFORMATION

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www.magicfinserv.com

ABOUT
CUSTOMER

Our customer is a global investment manager with 16Bn AUM, based in NYC. The firm's investment flexibility accommodates continual repositioning of the portfolio to capitalize on the most compelling risk-adjusted investment opportunities with specific return and liquidity objectives. The firm fosters a culture based on openness, global teamwork, and inclusion. It strives to unravel the complexities of investment strategy, management, and corporate culture, with its commitment to excellence.

BUSINESS CHALLENGE

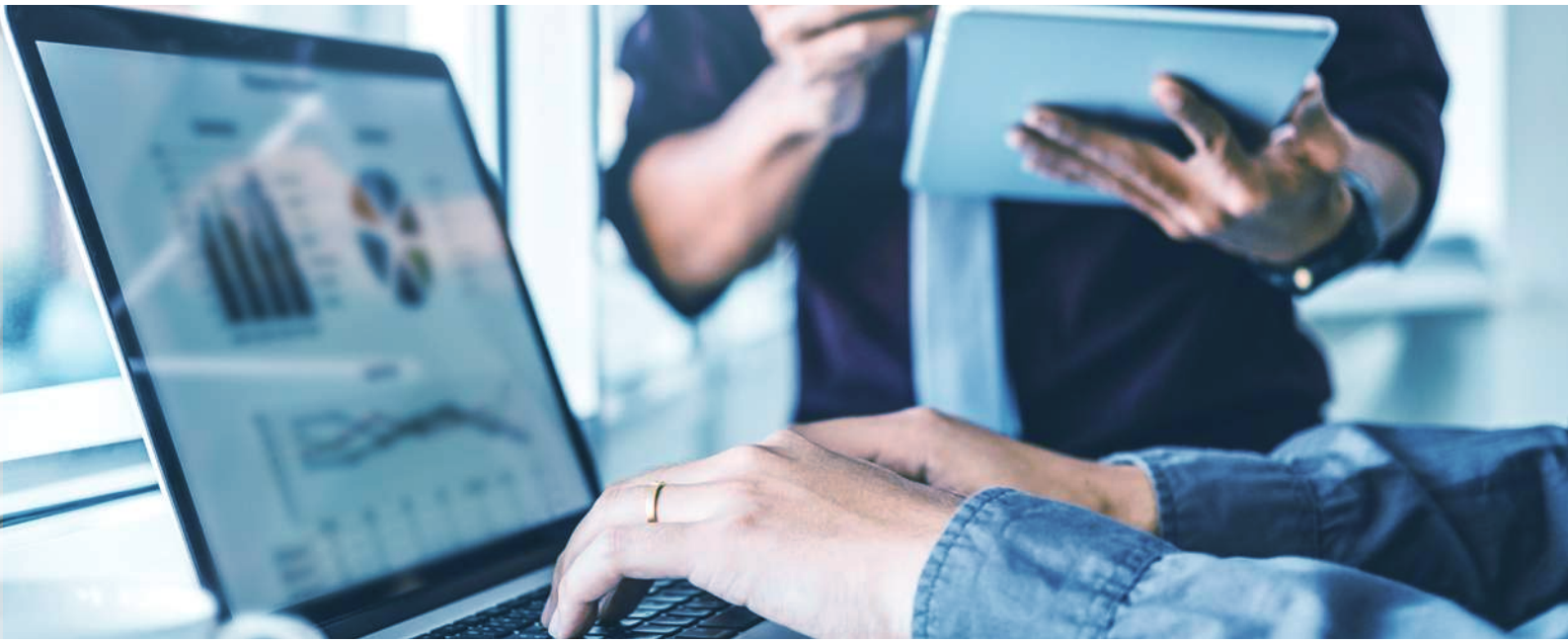
The compliance department at the firm wanted to proactively detect any unauthorized sharing of information with fraudulent intent, by any firm employee, over electronic media. Media under surveillance included emails, messages on IM, printed documents, faxes, etc.

Such monitoring was not possible manually. Using simple technology tools was also not viable since the information was spread over several diverse communication channels. Hence, it lacked all traceability and audit ability, which is vital, should a statutory compliance situation arise.

OUR **SOLUTION**

We utilized native capabilities of ELK Stack and Machine Learning capabilities (including NLP, OCR) of Magic DeepSight™ to build an integrated solution for detecting potentially fraudulent activities and anomalies.

HOW OUR
SOLUTION WORKS



CHOICE OF APPROACH

To implement the electronic media surveillance program, a combination of two approaches was used. We utilized ELK's ecosystem in conjunction with machine learning to achieve desired outcomes.

- Rule-based approach leveraging Kibana's filter mechanism
- Machine learning approach leveraging anomaly detection

While ELK rule-based approach has better accuracy and is faster to implement, the ELK machine learning-based approach increases surveillance scope significantly, by capturing patterns that cannot be captured and configured using rule-based systems. Therefore, following a hybrid process was chosen to bring the best results.

Additionally, a rule-based approach provides better accuracy initially for known cases, and for the unknown possibilities, machine learning evaluation should be relied upon.

TECHNICAL WORKFLOW

ELK stack flow is conceptually designed to allow users to take data from multiple sources in multiple formats and search, analyze, and visualize it in real-time.

The sources include emails, slack messages, printed documents, and images, etc.

The machine learning component helps to find patterns in this data. Time series modeling has been used to detect anomalies in the current data and forecast trends based on historical data.

The notification and alerts facility of ELK has been utilized to notify administrators about fraudulent activity and transactions.

VISUALIZATION AND DASHBOARDS

Various visualization tools like- bar charts, metrics tools, etc., provided by Kibana are utilized for representing fraudulent information sharing activities captured from implementing several other use cases, including rule-based and machine-learning-based use cases.

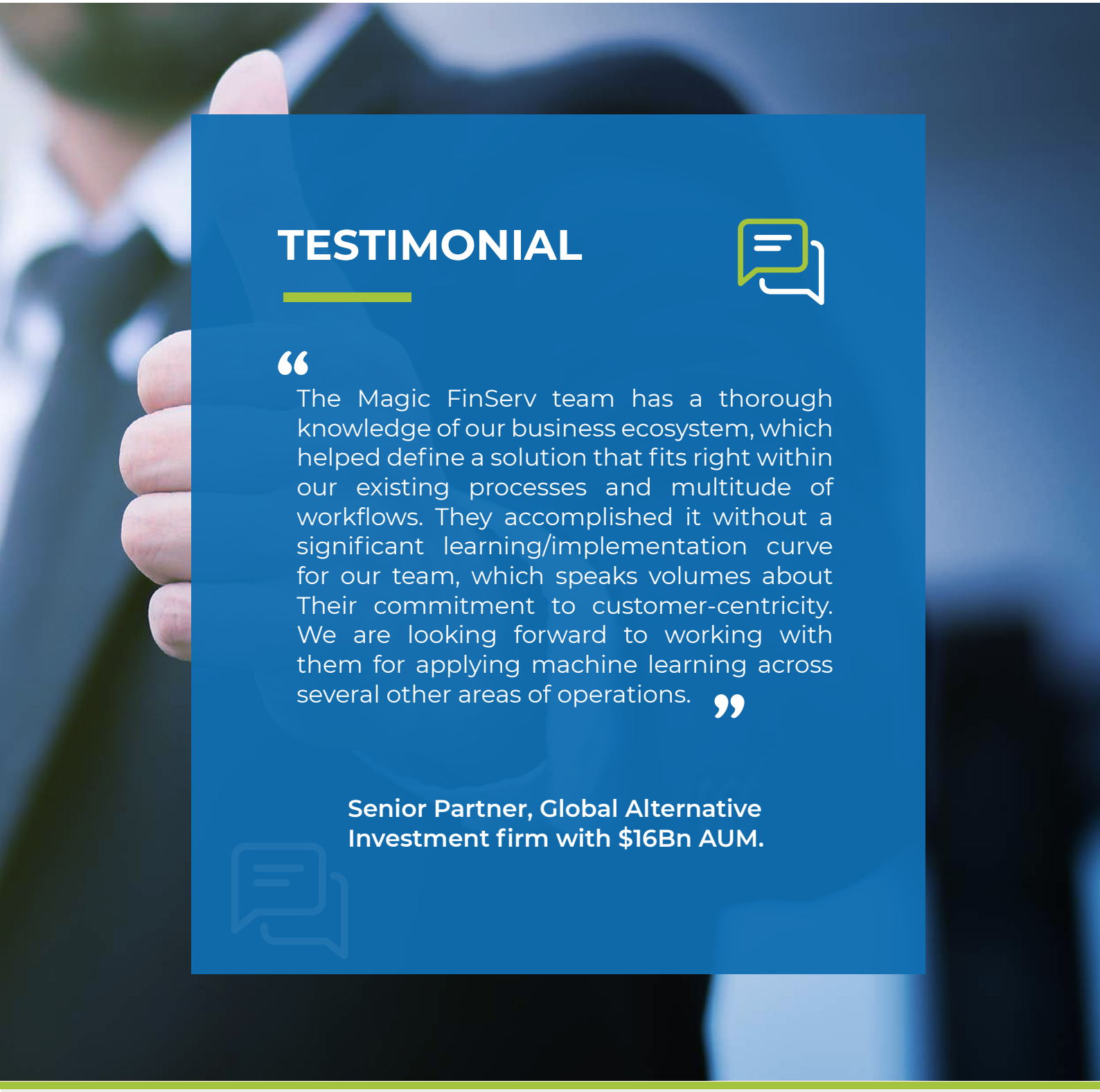
ALERTS AND NOTIFICATIONS

Alerting (via Watcher) is used to send alerts (as configured mail/Slack etc.) based on the fraudulent activities captured by implementing rule-based filters and machine learning-based filters. Additionally, emails are sent to administrators.

BENEFIT ACHIEVED

The firm has saved **up to 28% of their compliance team's costs** spent on manually sifting and identifying the potentially fraudulent activities. With Magic FinServ's machine learning-based solution, t**heir compliance team is now processing over 4X number of potentially fraudulent activities**, thus ensuring a high degree of compliance and a vast safety net from possible regulatory and statutory litigation.

Since the Magic FinServ team has extensive experience building capital market technology solutions, care has been taken to ensure AI's explainability on the dashboard alongside a beautiful user interface, making it a delight to use.



TESTIMONIAL

"The Magic FinServ team has a thorough knowledge of our business ecosystem, which helped define a solution that fits right within our existing processes and multitude of workflows. They accomplished it without a significant learning/implementation curve for our team, which speaks volumes about Their commitment to customer-centricity. We are looking forward to working with them for applying machine learning across several other areas of operations."

Senior Partner, Global Alternative Investment firm with $16Bn AUM.

For feedback, questions, or comments about this case study, contact us at mail@magicfinserv.com.
To learn more and get a personalized demo, visit us at www.magicfinserv.com

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