



Automated Daily Regression Monitoring Dashboard

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Software Development Intern
Scoring QA Team

BACKGROUND

Education

- B.Tech in Computer Science & Technology, India (2016-2020)
- M.S. in Information Technology at Arizona State University (2022-2024)



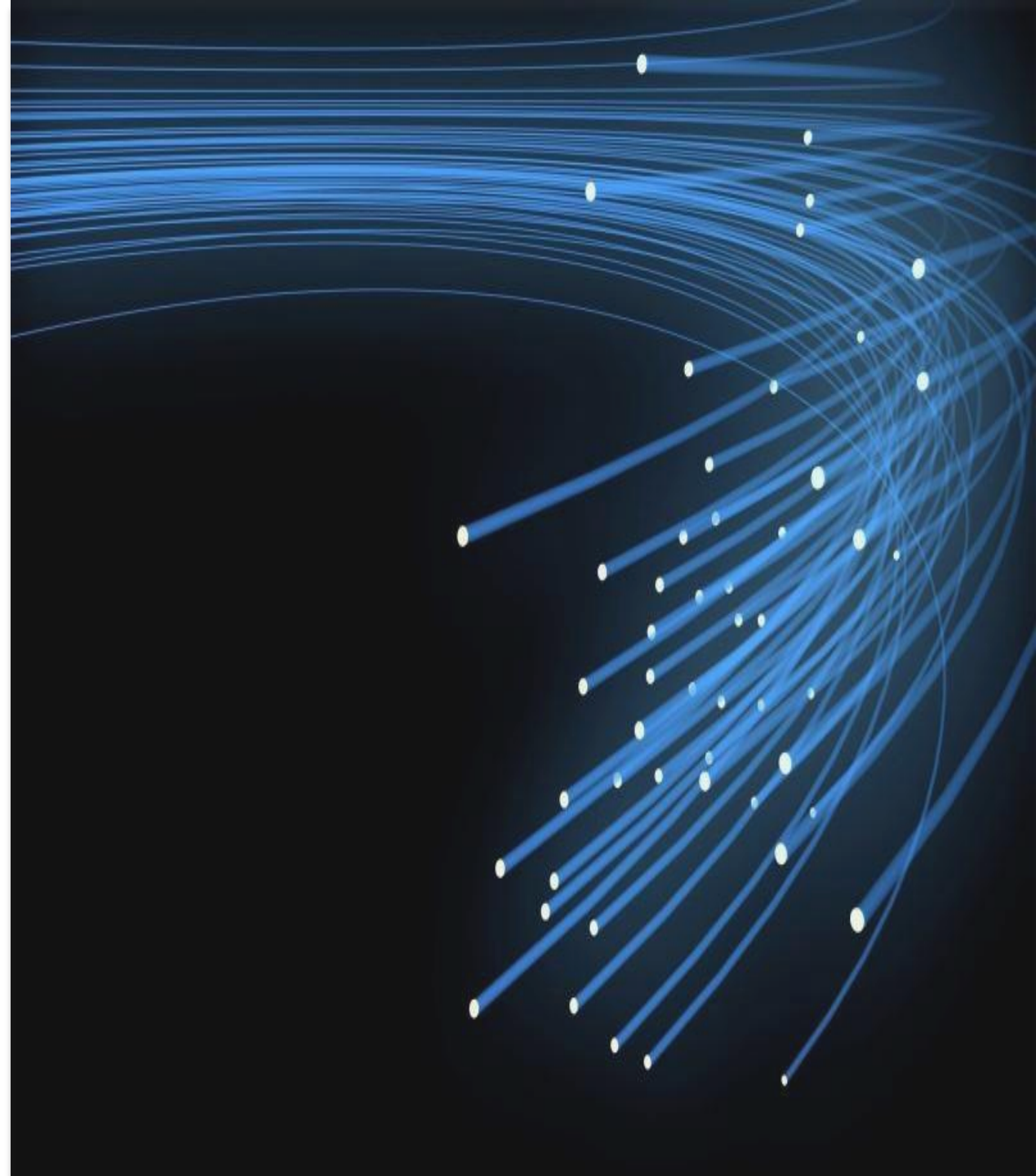
Work Experience

- Business Intelligence & RPA Developer, Torm India (2020-2022)
- Software Development Intern – LexisNexis Risk Solutions (2023)



AGENDA

- LexisNexis Risk Solutions - Scoring QA Team
- Summer Internship Project
 - Program Overview
 - Automation and Data Refresh
 - Dashboard Testing and Iteration
 - Impact
- Lessons Learned/Internship takeaways



Scoring QA Team



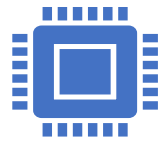
Monitoring and Analysis



Purpose of Monitoring:

The main purpose of monitoring certification and production is to ensure the smooth functioning of various products and shells

Monitoring validates the accuracy of existing and newly ingested data and verifies the integrity of the underlying code



Transaction Volume and Query Scope:

Daily Collections Reports

1

At 10 am CST, input samples are sent for monitoring certification, and at 12 am CST, the process extends to production.

2

After the collections are completed, reports are generated, comparing yesterday's collections to today's collections.

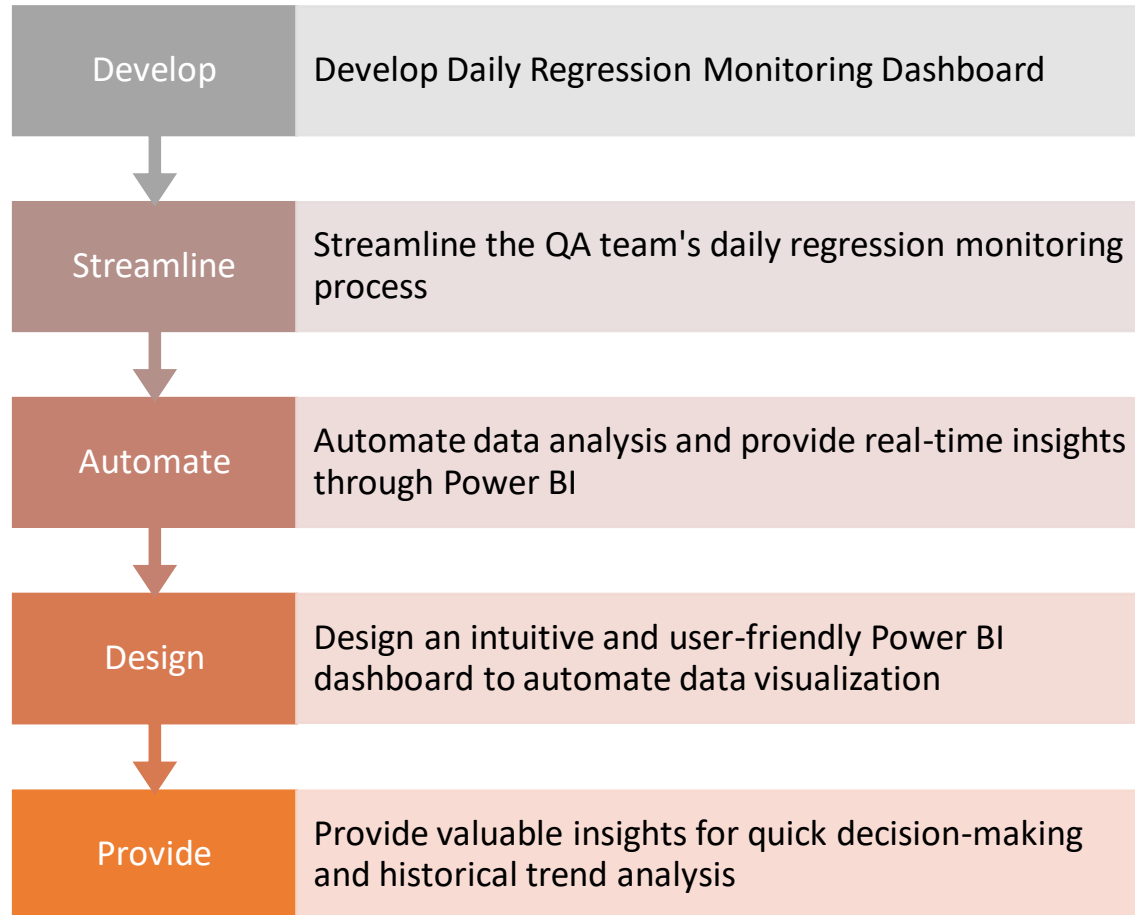
3

The reports focus on the keys that were updated the previous day, allowing to analyze the impacts in the current day's reports.

Internship Project: Automated Daily Regression Monitoring Dashboard



Project Overview



Automation and Data Refresh



Automatic data retrieval from web data source as a key to Super file



Automation eliminates manual processes and enhances efficiency



The dashboard incorporates automated processes to ensure up-to-date data



Data refresh mechanisms regularly fetch new data and update the visualizations



Users can rely on the dashboard for real-time data insights without manual intervention



Scheduled data refreshes at specific intervals

Dashboard Testing and Iteration



Extensive testing conducted to ensure functionality and usability of the dashboard



QA team actively involved in providing feedback and suggestions for improvement



Close collaboration with the QA team to gather insights and identify areas for enhancement



Iterations focused on creating a user-friendly interface and intuitive navigation

Impact



Time saved by eliminating the need for manual data examination



Real-time insights enable faster and more informed decision-making



Historical trend analysis provides valuable insights for proactive measures



Automation ensures consistent and accurate data visualization and analysis



Easy navigation, clear visualizations, and valuable insights

Data Analysis and Insights

Product Score Trend

Data is typically available at 3 p.m. Central Time

Data as of Wednesday, July 19, 2023

Date Range

7/6/2023

7/19/2023

Model

All

Environment

CERT

Datatype

NonFCRA

Process

XML

Process Version

All

Product

Select all

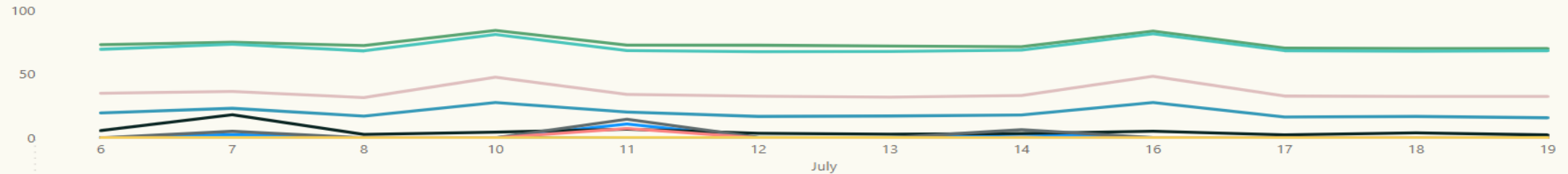
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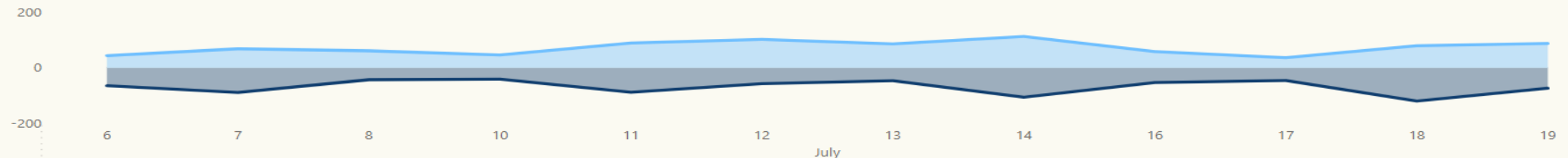
Percent Score Difference by Month, Day and Model

Model ● bnep ● bnas ● bnat ● bus2exec_index_rep1 ● bvi ● cvi ● FIBN12010 ● firm_1207_0 ● fisn_12103_0 ● fiwn_1203_0 ● FP31505 ● nap ● nas ● rep1_cvi



Dual Negative Score and Sum of Dual Positive Score by Month and Day

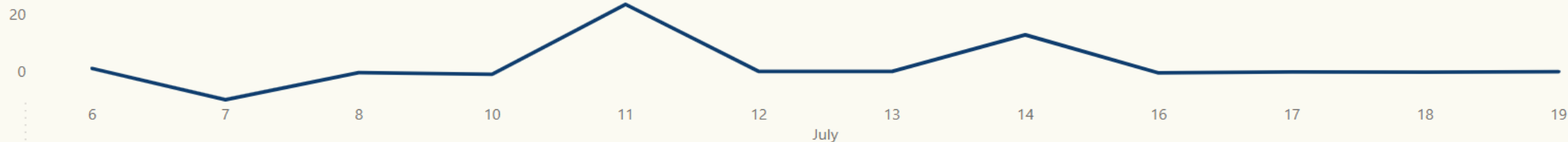
● Sum of Dual Negative Score ● Sum of Dual Positive Score



Data Analysis and Insights

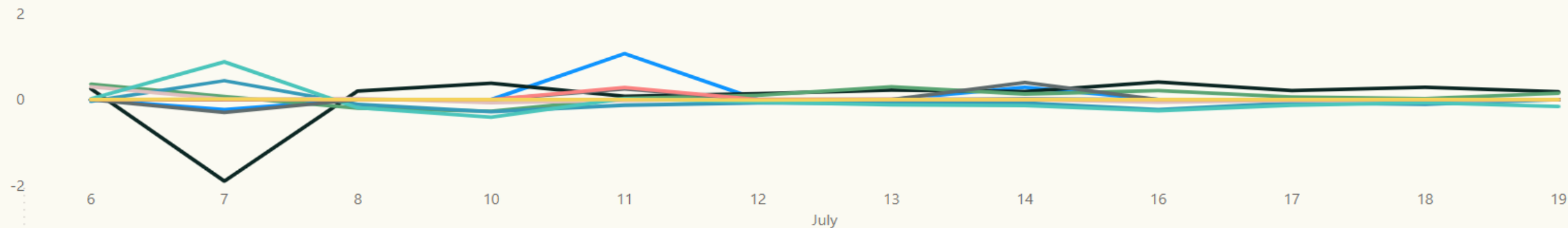
Z Score by Month and Day

Datatype ● NonFCRA



Dual Mean Change by Month, Day and Model

Model ● bnap ● bnas ● bnat ● bus2exec_index_rep1 ● bvi ● cvi ● FIBN12010 ● firm_1207_0 ● fisn_12103_0 ● fiwn_1203_0 ● FP31505 ● nap ● nas ● rep1_cvi



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Lessons Learned and Takeaways



Takeaways

Importance of User Feedback

- User input helps identify pain points, improve usability, and enhance the overall dashboard experience

Data Quality and Validation

- Ensure data quality and accuracy by implementing robust data validation processes

Scalability and Performance Optimization

- Ensure that the dashboard can handle increasing data volumes and maintains its efficiency even as usage grows

Continuous Monitoring and Maintenance

- Regularly monitoring and maintaining the dashboard guarantees that it remains up-to-date and functioning optimally

Thank you!

