



WOOSTER

Applied Methods and Research Experience

Goodyear Tire Wear Visualization Project

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The Goodyear tire wear visualization project aimed to prepare a set of interactive tableau dashboards that provide insight into tread and tire wear patterns in Goodyear's global tire wear data sets.

OVERVIEW

Our project focuses on developing a set of interactive dashboards to provide comprehensive insights into tire tread wear. By connecting to and preprocessing a large global tire wear data set on Amazon Athena, our team first performed a series of predictive calculations on tire wear specifically tailored to the needs of our client, and then prepared a set of dashboards that will enhance understanding of tire performance across different scenarios to allow for more accurate predictions and enhanced decision-making. Overall, our dashboards are intended to improve product development and customer satisfaction.



CLIENT

Goodyear, a global leader in tire manufacturing, is renowned for its innovation, quality, and commitment to safety. With over a century of industry experience, Goodyear continually advances tire technology to meet customer needs. Their expertise and forward-thinking approach are vital to our project, helping us deliver data driven insights for improved tire tread wear analysis.

Goodyear Associates: Rebecca Bandy and Theresa Nopper.

EXPERIENCE

The Goodyear Project provided us with valuable experience in data refinement, predictive analytics, and the development of a tableau dashboard. The project, though successful, was not a smooth ride. It provided us with real-life roadblocks and ways how to overcome them. This experience has honed our skills in advanced data analytics, cross-functional collaboration, and user-centric design.



CONCLUSION

Throughout the project, we have worked to successfully deliver a comprehensive Tableau dashboard that provides valuable insights into tire tread wear. Our key deliverables included the refinement of global tire wear data sets, the development of predictive analytics tailored to Goodyear's processes, and the creation of intuitive visualizations for enhanced data interpretations.

Accomplishments: Data discovery and structuring, cleaning, validation and presentation. We designed a user-friendly tableau dashboard for real-time data analysis.



We gratefully acknowledge the invaluable contributions of our advisors Moses Luri and Michael Bush for their guidance and help throughout the Goodyear Project. We would also like to thank Professor Frazier for her help and insights on how we could improve the outcome of our project. We would also like to thank the Goodyear Engineering team for their helpful feedback throughout our progress. Furthermore, we would like to thank Rebecca Brandy and Theresa Nopper for their patience and cooperation through all our roadblocks and dedication to the success of our project. Lastly, we would like to thank the AMRE team for trusting us and giving us the opportunity to partake in this amazing program.