EXECUTIVE SUMMARY

The topic will be how we can convert casual hover bike riders (Rebels) to annual membership holders (Imperials) for a hover bike ride-sharing company. I chose this topic because it compliments a project for the [Google Data Analytics Professional Certificate](#) course offered by Coursera. I have always wanted to convert the R programming language project to a Tableau story but never had the time, but now is the chance to do so… with a twist!

WHY

- **Business Case/Other Goals** - The Director of Marketing at LightSpeeders, Darth Vader, believes the company's future success depends on maximizing the number of annual memberships. Therefore, the team wants to understand how casual hover bike riders (Rebels) and annual members (Imperials) use LightSpeeders hover bikes differently. From these insights, the team will design a new marketing strategy to convert Rebels to Imperials. But first, LightSpeeders executives must approve the recommendations, so they must be backed up with compelling data insights and professional data visualizations.

- **Intended Outcome –** LightSpeeders' finance analysts have concluded that annual members are much more profitable than casual riders, who consist of single-use riders and full-day riders. Darth Vader believes that maximizing the number of Imperials will be key to future growth and he believes there is a very good chance to convert Rebels to Imperials.

WHO

- **Stakeholder –** Persona 1: Darth Vader (Director of Marketing)

Persona: Darth Vader

"I am altering the deal. Pray I don't alter it any further."

Darth Vader needs to turn findings by analysts into a data-driven market strategy to sell to the Galactic Senate.

Role: Director of Marketing

Organization: LightSpeeders

Age: 43
Gender: Male
Education: Undergrad at Jedi Academy; post-graduate at Sith Academy

Goals:
- Increase annual membership for company growth.
- Use ridership data to help convert single-use riders and full-day riders into annual members.
- Be able to make a case to the Emperor Palpatine (chairman) and the Galactic Senate of his strategy.

Challenge and Needs:
- Limited face time with chairman and Senate.
- Great at convincing others using the Force, but needs data-driven insights to persuade Palpatine.
- Knows what he wants and will get it forcefully.

Context:
Will be holding a 5 to 7-minute presentation at the next senate meeting in front of over 2,000 senators on the senate floor.

- **Audience –**
  - **Quantitative Audience**: Galactic Senate senators/members who do not understand the minutiae of the business; prefers top-level facts
  - **Qualitative Audience:** Persona 2: Emperor Palpatine (chairman)

Persona: Emperor Palpatine

"Everything that has transpired has done so according to my design."

Emperor Palpatine is a conservative, highly connected and financially-oriented Galactic Senate member. He feels a responsibility for ensuring the financial stability of the company. Is borderline obsessed with finding "profits" in business operations, where ever it may exist.

Role: Chairman of Galactic Senate

Organization: LightSpeeders

Age: 87
Gender: Male
Education: Trained in the dark side of the Force

Goals:
- Wants quick clear and credible updates.
- Wants to ensure financial stability and make company more profitable.
- Prefers data-driven decision making.
- Wishes to sign up annual members before competitor does
- Needs large fonts (poor eyesight)

Challenge and Needs:
- Heard rumors of a competitor's campaign regarding sign up hoverbike riders for their annual membership.
- Wants to know the ridership tendencies of members and non-members
- Interested in data-driven insights and recommendations since forcefully achieving goals are no longer satisfying.

Context:
Monthly senate meeting. There over 2,000 senators in the audience looking at a big screen across the senate floor.

- **Subject-Matter Experts –** Business intelligence Analysts and Data Analysts

WHAT

- **Data Sources –** [Trip data](#) stored by LightSpeeders. It is broken up monthly and stored as 12 .zip files:

    - [202306-divvy-tripdata.zip](#)
    - [202307-divvy-tripdata.zip](#)
    - [202308-divvy-tripdata.zip](#)
    - [202309-divvy-tripdata.zip](#)
    - [202310-divvy-tripdata.zip](#)
    - [202311-divvy-tripdata.zip](#)
    - [202312-divvy-tripdata.zip](#)
    - [202401-divvy-tripdata.zip](#)
    - [202402-divvy-tripdata.zip](#)
    - [202403-divvy-tripdata.zip](#)
    - [202404-divvy-tripdata.zip](#)
    - [202405-divvy-tripdata.zip](#)

    The data has been made available by Motivate International Inc. under this [license](#).

    The 12 .zip files were downloaded, stored, and extracted into the /LightSpeeders/raw_trip_data/ directory.

- **Data Quality –** The files will need to be cleaned and combined. The data cleaning process done with Python can be view [here](#) or link here: https://github.com/KevinVChin/Google-Data-Analytics-Professional-Certificate/blob/main/data_cleaning.ipynb

- **Data Timeliness –** The data goes back many years, but we will use data available for the last 12 months (June 2023 to May 2024).

HOW

- **Format(s)** – multi-frame visualization, narrated dashboard, presentation slides, etc.

- **Presentation Vehicle** – 5 to 7-minute presentation on the senate floor; font needs to be larger for people with bad eyesight.