





#### It's Corn!

Fuel Livestock feed

**Sweeteners** Cosmetics

Adhesives Filtration systems

PLA plastics Herbicide

**Medication** Food



2024 will have about 3,500
Growth Degree Days for Corn
in the Jamestown, ND area





#### **Business Problem**

Varieties of corn are optimized for different numbers of Growth Degree Days (GDD).

Using weather data we will produce a time series analysis that can predict weather features for GDD.

Business Data Analysis
Problem Overview





#### **Data Overview**

#### Data

- ☐ NDAWN by NDSU
- 21 years of weekly Weather Data
- 13 unique factors

#### **Limitations**

- Only Jamestown, ND Weather Station
- Weekly averages soften outliers
- GDD are calculated daily



Data Overview **Analysis** 



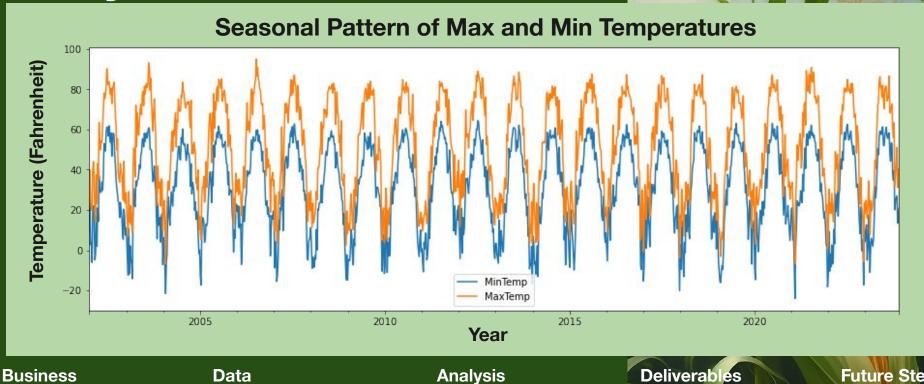


**Business** 

**Problem** 

Data

**Overview** 



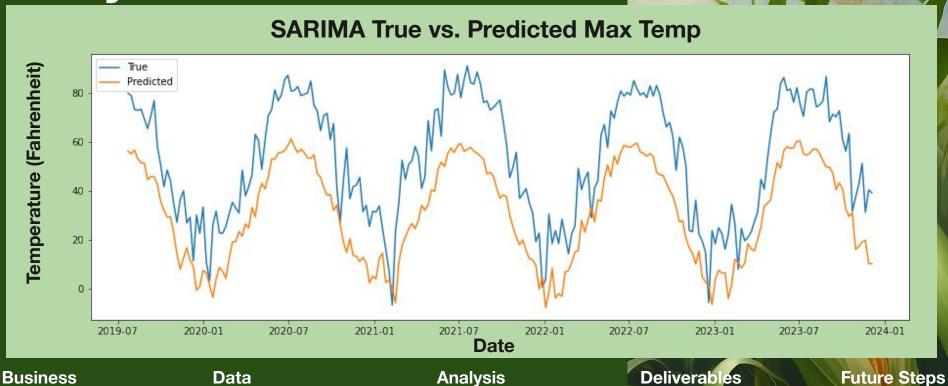
**Analysis** 

**Future Steps** 



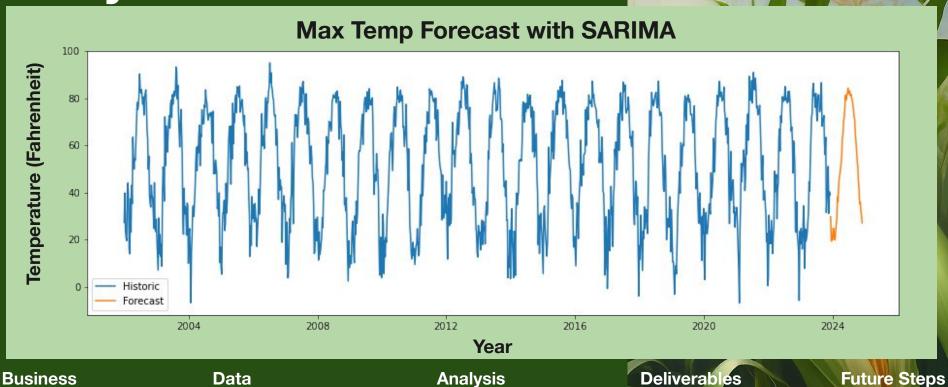
**Problem** 

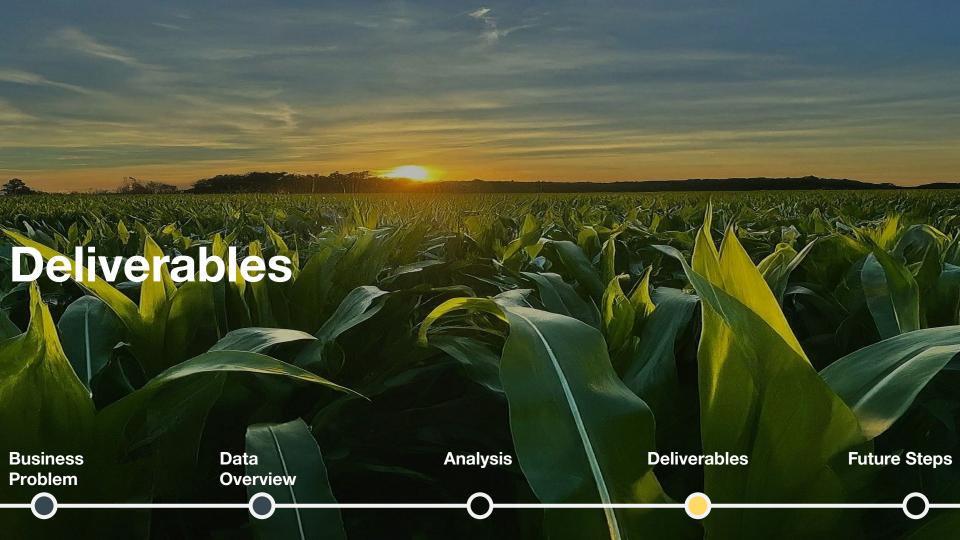
**Overview** 



**Problem** 

**Overview** 

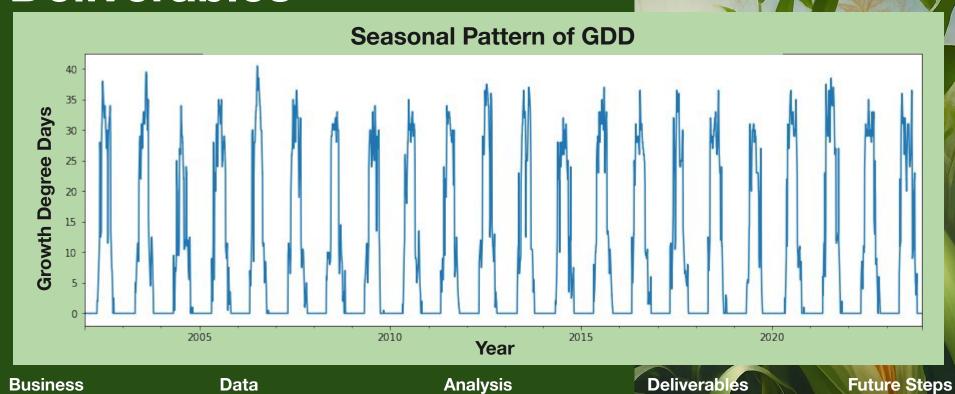




#### Deliverables

**Overview** 

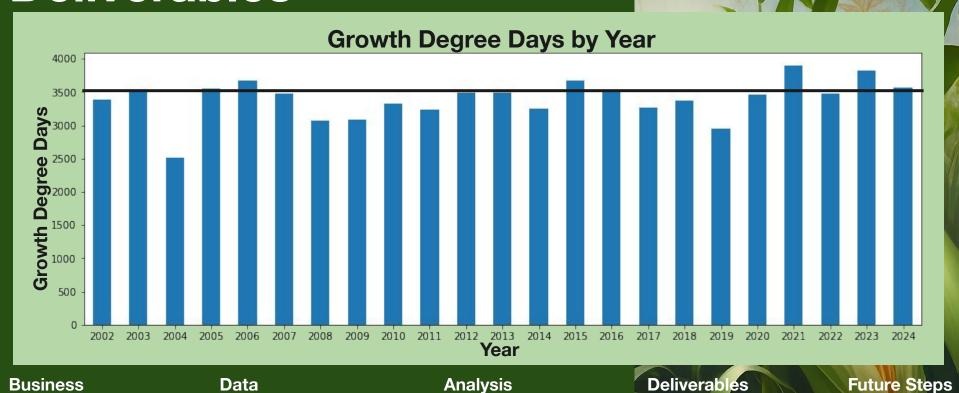
**Problem** 

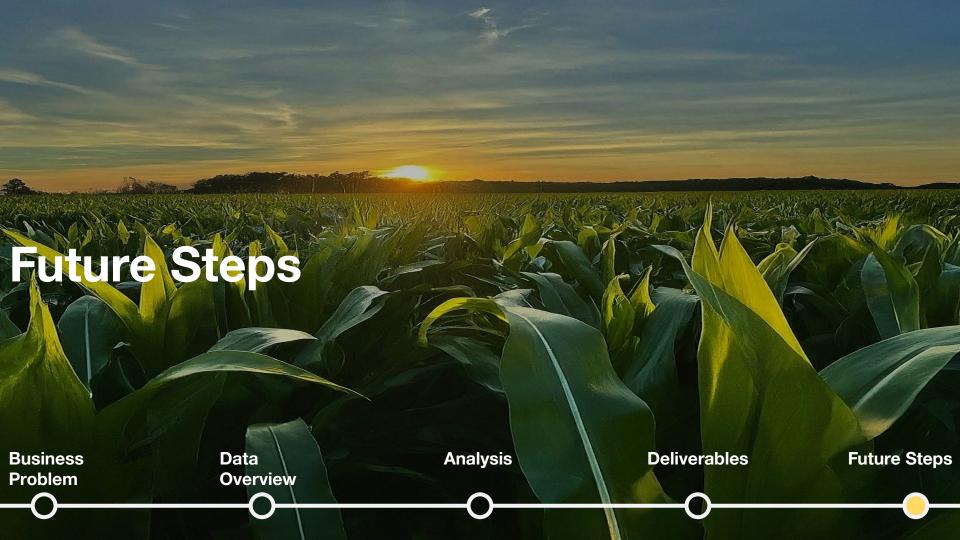


#### **Deliverables**

**Overview** 

**Problem** 





# **Future Steps**

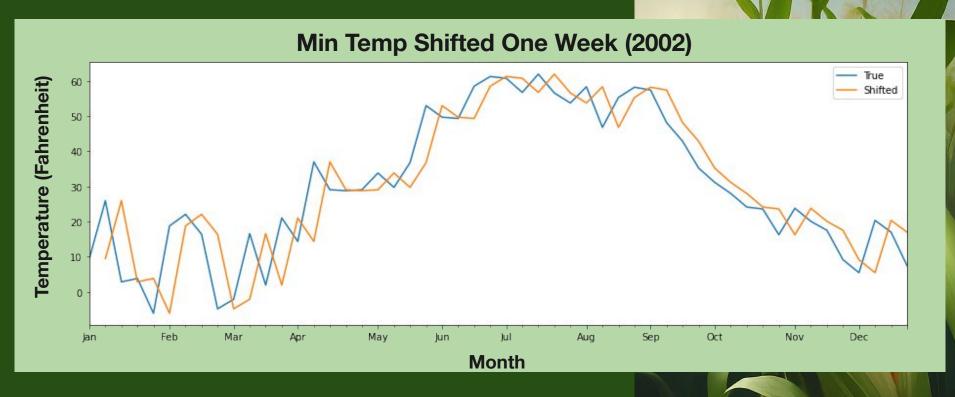
- Add more Weather Stations
- ☐ Compare with USDA Corn Yields
- Integrate other weather features

Business Problem Data Overview Analysis





## **Appendix**



# Appendix



