# STRATEGY PROPOSAL FOR SOCAR ZONE THROUGH DEMAND ANALYSIS
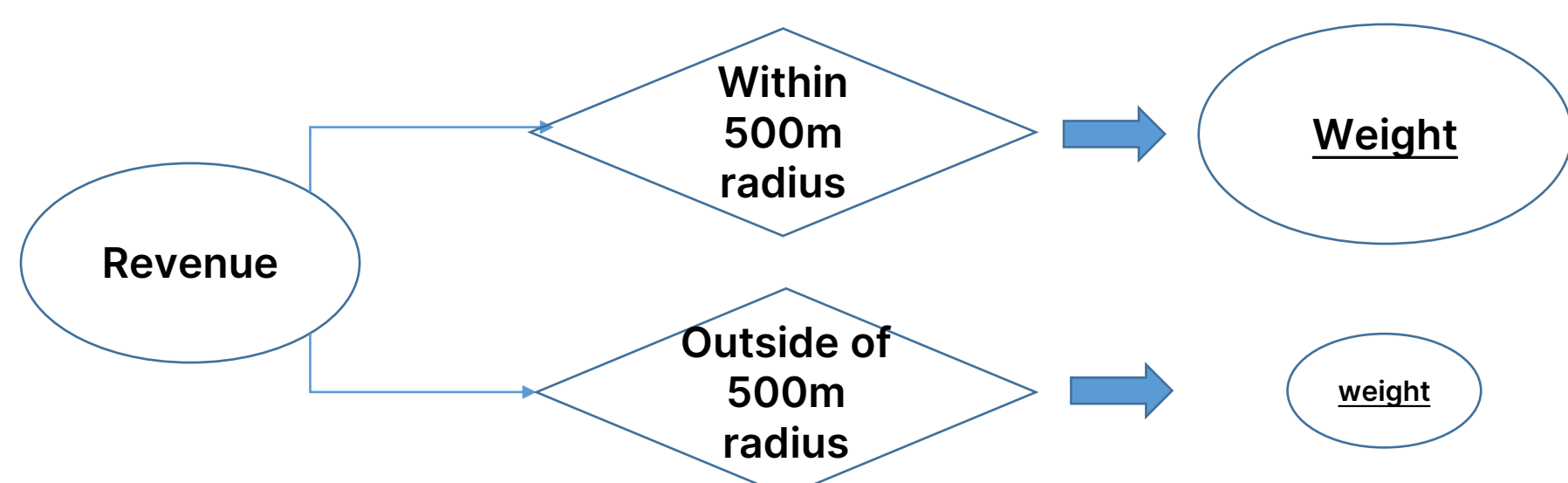
MODULABS × SOCAR
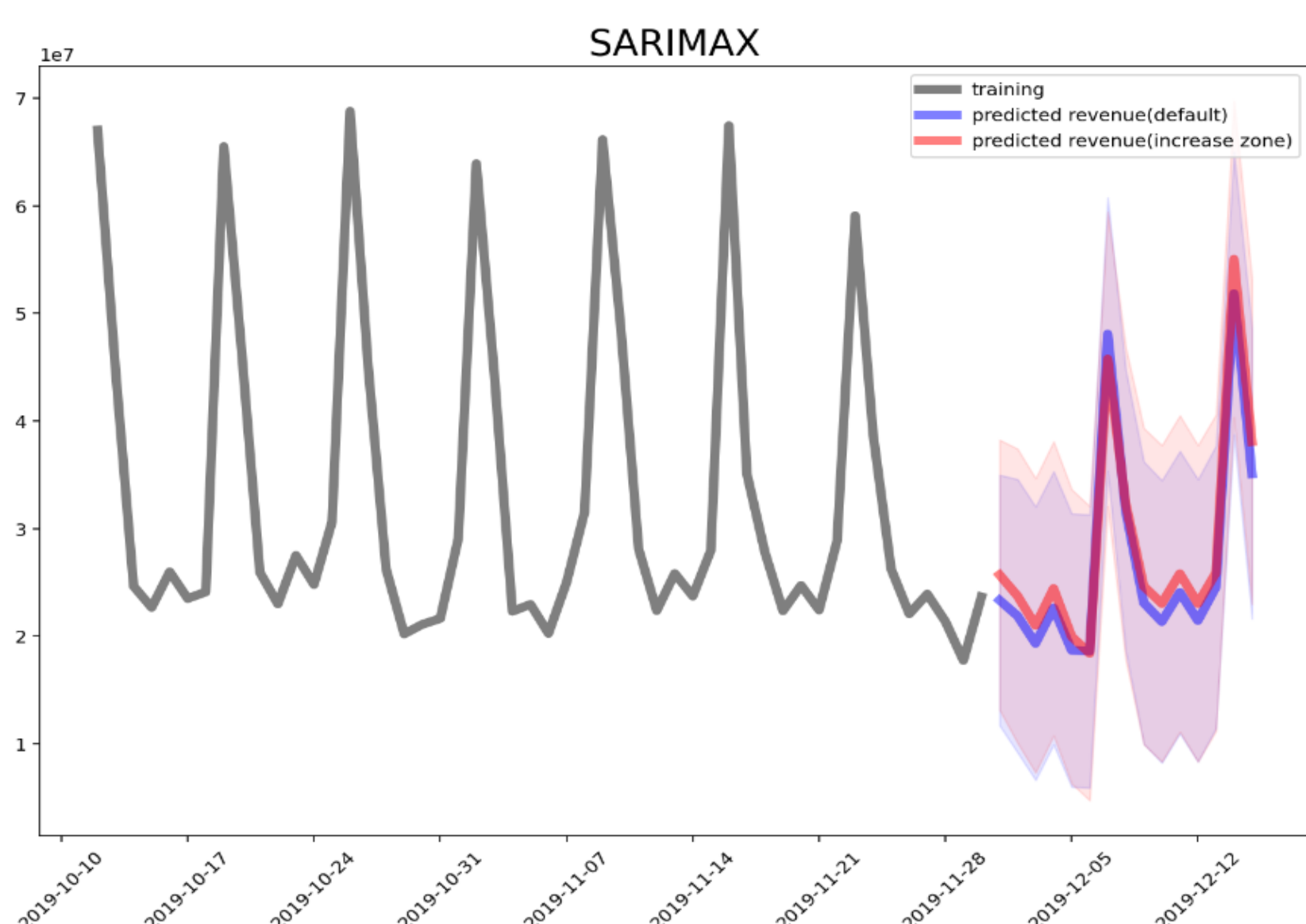
**팀 명** 중.꺾.마 **팀 구성** 김예진, 강덕훈, 박태준

# MOTIVATION AND GOAL

✓ **Factors affecting Socar's revenue**
80% of consumers chose convenience and promptness as the main factors for positive customer experience.

✓ **Convenience of use**
Socar zone is the starting and ending point of customer use.

✓ **Location selection of Socar zone**
locate Socar zone within 500m radius of the apartment
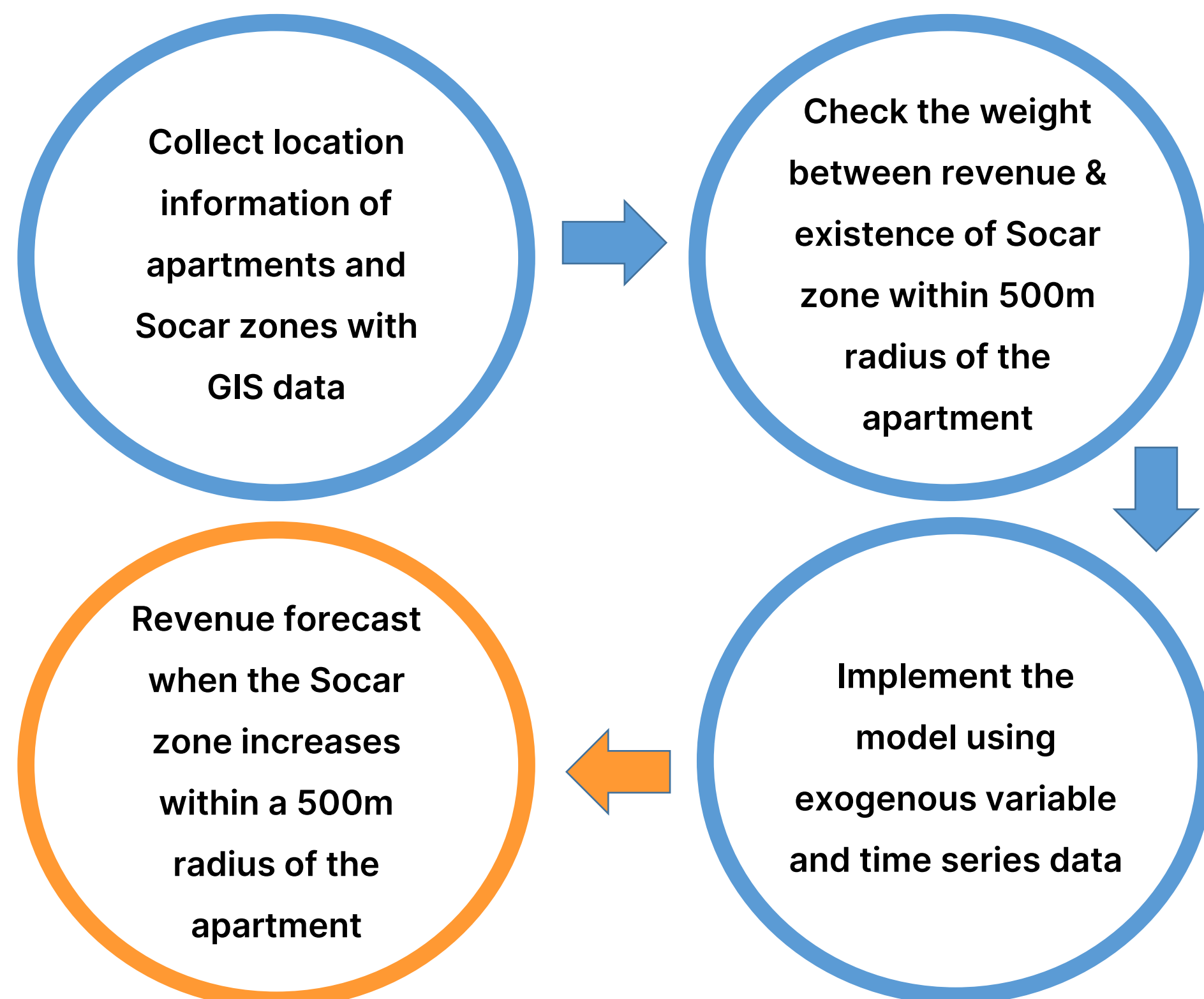
# PROJECT DETAILS

✓ Collect location information of apartments and Socar zones with GIS data

✓ Clustering according to the existence of Socar zone within a radius of 500 m of the apartment

✓ Through correlation analysis, confirm the correlation between revenue and whether there is a Socar zone within a 500m radius of the apartment



# PROJECT DESIGN



- Collect location information of apartments and Socar zones with GIS data
- Check the weight between revenue & existence of Socar zone within 500m radius of the apartment
- Implement the model using exogenous variable and time series data
- Revenue forecast when the Socar zone increases within a 500m radius of the apartment

✓ Demand forecasting by implementing the optimal model
  - Improve the performance of the model and evaluate the model
  - Revenue forecast for expansion of Socar zone within a 500m radius of the apartment
  - Suggest location for Socar zone



Example of the location of the new Socar zone

# MODELING



SARIMAX
- training
- predicted revenue(default)
- predicted revenue(increase zone)

✓ **Microscopic Demand Analysis Using Dynamic Regression Model**

- A dynamic regression model is a model that considers both time series data and exogenous variables. Using this model, even complex time series data can improve predictive performance. Prediction is possible through micro-analysis, which is useful even when comparing data with regional differences.
- Git hub : https://github.com/Deok-Hun/aiffelthon_public

SOCAR x AIFFEL 해커톤 결과 발표회