ISyE6501-Course Project Chen Yi Ju

1.Project chosen:

"Korean professional baseball team KT wiz uses customized marketing and data visualization to keep the stadium filled"

(https://www.sas.com/en_us/customers/kt-wiz-ko.html)

2.Brief description:

A new team in Korea's premier baseball league, the KT wiz used large amount of data including booking/payment information, social media postage and others to optimize and customize their marketing strategies.

Actual examples include but are not limited to:

- 1) strengthening its Legend Members loyalty program
- 2) sending fans offers for free tickets to increase visiting rates on slow days
- 3) checking the execution and connecting rates, and see how many tickets were redeemed.

3. Modeling

The use of data and analytics varies a lot in this example, with one goal: increasing number of audiences.

Among the analytics included, I choose to model the following:

"Optimizing market campaigns",

To be precise, I consider the scenario of having a total digital marketing budget and marketing campaigns are conducted mainly through online within the team's app and related websites/fanpages.

I consider the analytics modeling used as the following:

1. Classifying audiences

Given:

a. Purchasing data (online) with information on age, occupation and ticket types

Use: Clustering

To: Classify audience into different purchase group

2. A/B testing for marketing campaigns on each group

Given:

a. Output from previous model(the groups)

b. Multiple marketing campaigns

Use: A/B testing

To: Decide on optimal campaign for each group

3. Optimization for marketing resources distribution.

Given:

- a. Output of A/B testing
- b. Campaign costs and revenue/profit for each campaign of each group
- c. Size of group

Use: optimization on linear regression model

To: distribute resources/budget to each group

Potential/unsolved problems:

- Only includes tickets bought through apps and websites, which would ignore potential audiences and people buying at booths
- Market research on potential audience and overall population structure of audience/ city is needed to be more precise
- Focuses on "getting more people who have already been to the games" only.