# Team Meeting 6

**26 SEPTEMBER 2022/ 9 PM / ZOOM**

## Attendees

Ke, Oliver, Tommy, Xavier

## Agenda

- ☑ ~~Discuss ranking system models~~
- ☑ ~~Discuss merchant fraud metric~~
- ☑ ~~Discuss merchant segmentation based on industry/tags~~
- ☑ ~~Discuss relevant information to include in presentation~~

## Notes

- **Tommy and Ke found that most supervised learning-to-rank Machine Learning algorithms are not appropriate for our tasks since there are no label or feedback functions.**

- **Tommy and Ke suggested linear combination of all metrics as the heuristic to rank merchants.**

- **Xavier brought up the initial cost of operations and that we should only consider merchants with projected revenue that break even or surpass the operation costs.**

- **Ke suggested a gradient descent method with revenue-related loss function.**

- **Xavier suggested doing market research on major segments to justify weightings of different metrics when ranking merchants.**

- **Oliver discussed the idea of segmenting merchants based on the ground of diversifying the firm's markets.**

- **Oliver and Ke discussed the fraud data and how merchant fraud metrics have some discrepancies with the transaction data.**

- **We only have 2 weeks left before the final presentation.**

## Action Items

- Merge ETL script code. (Xavier).
- Implement an average rank ranking system. (Xavier)

- *If time permits*, work on a regression analysis of the fraud probabilities. Predict fraud probability of a transaction based on its features? (Xavier)
- Market research in terms of weighting (Tommy).
- Begin consolidating data and insights to include in the final presentation. Whenever you find any major insights, please include them (All).
- Find 3-5 merchant segments with justifications (Oliver).
- Find some unsupervised models (Glendon).

# Next Meeting

Planned for next Thursday during the workshop.