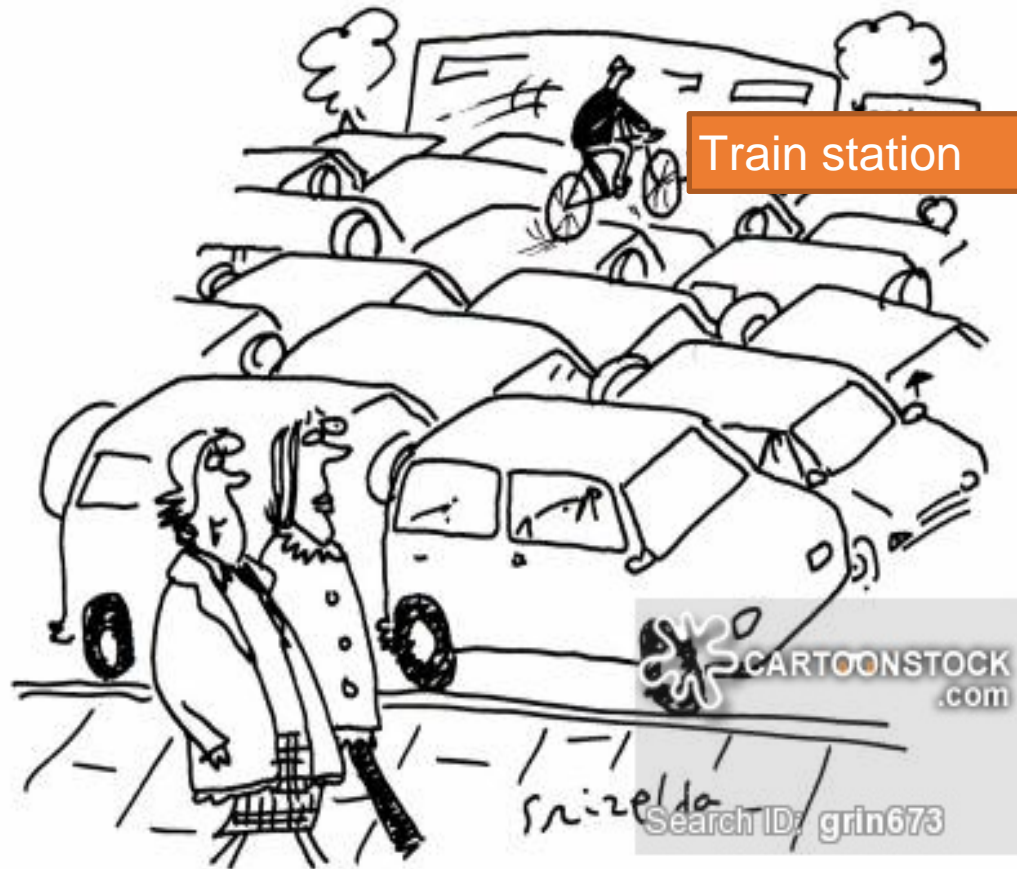# *Did You Experience…*

nervous

Xiaochen Ma

I am waiting for the bus to train station
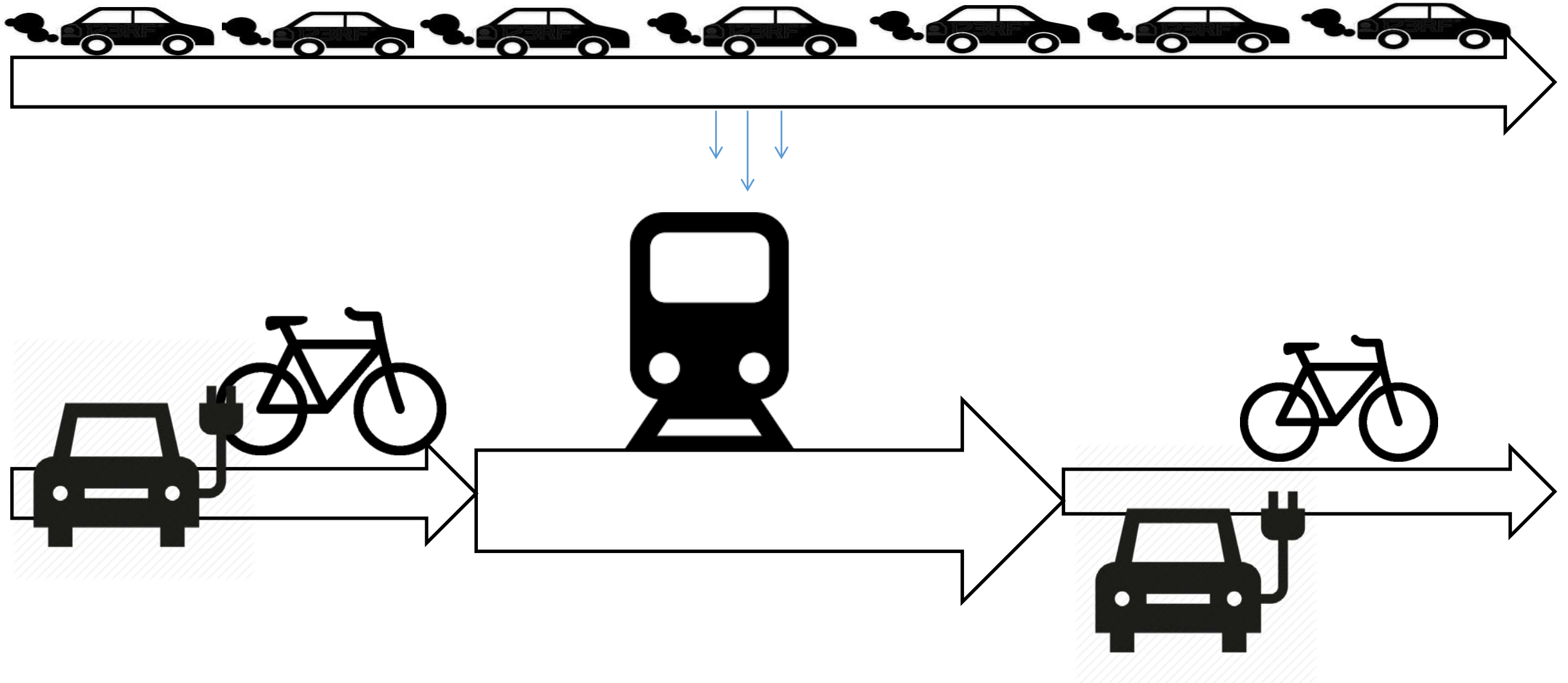
Optimize Train Feeder Service
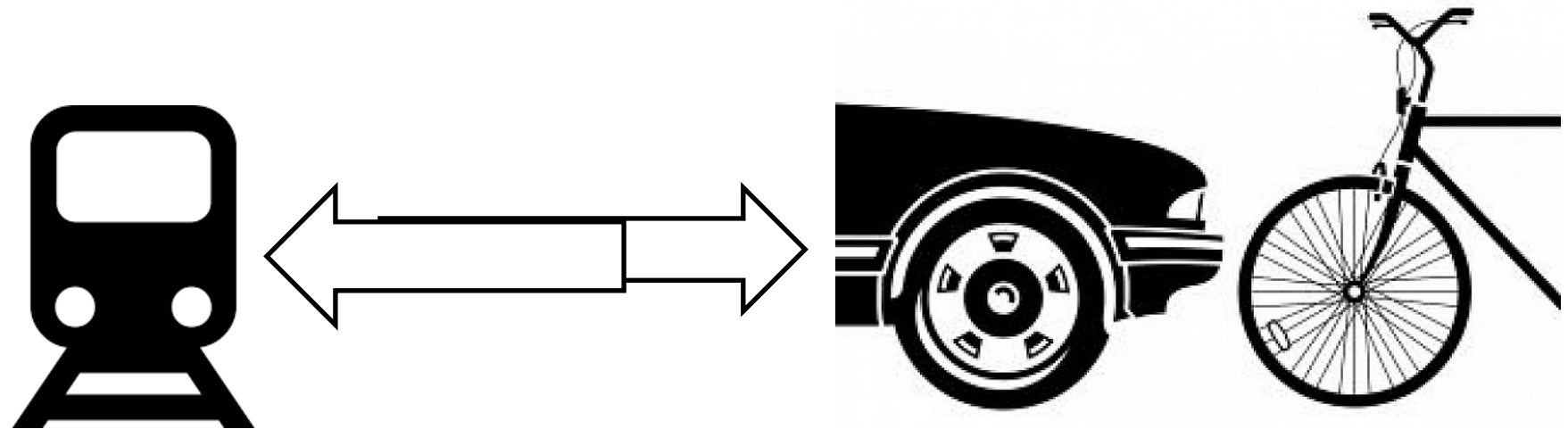

Train station

It is nice to see people go to train station easily

Improving the feeder service from/ to train station by optimizing the service area of an electric bike system used for the last mile of train trips

1 How to attract more inter-city travellers to use train mode by improving the feeder service?

2 How to improve the feeder service area scope and quality by using the "quick slow" modes?

3 What are the criteria of this "optimization" feeder system?

4 What are the benefit of the feeder system ?

Train station feeder system Network design ,using Liner programming.

Can we attract more travellers?

Understand people demand

(People are not packages…)

Render them service

What are kinds of travellers are easier to be attracted ?

>Identify (multi) modal travel groups based on the self-reported frequency of mode use.
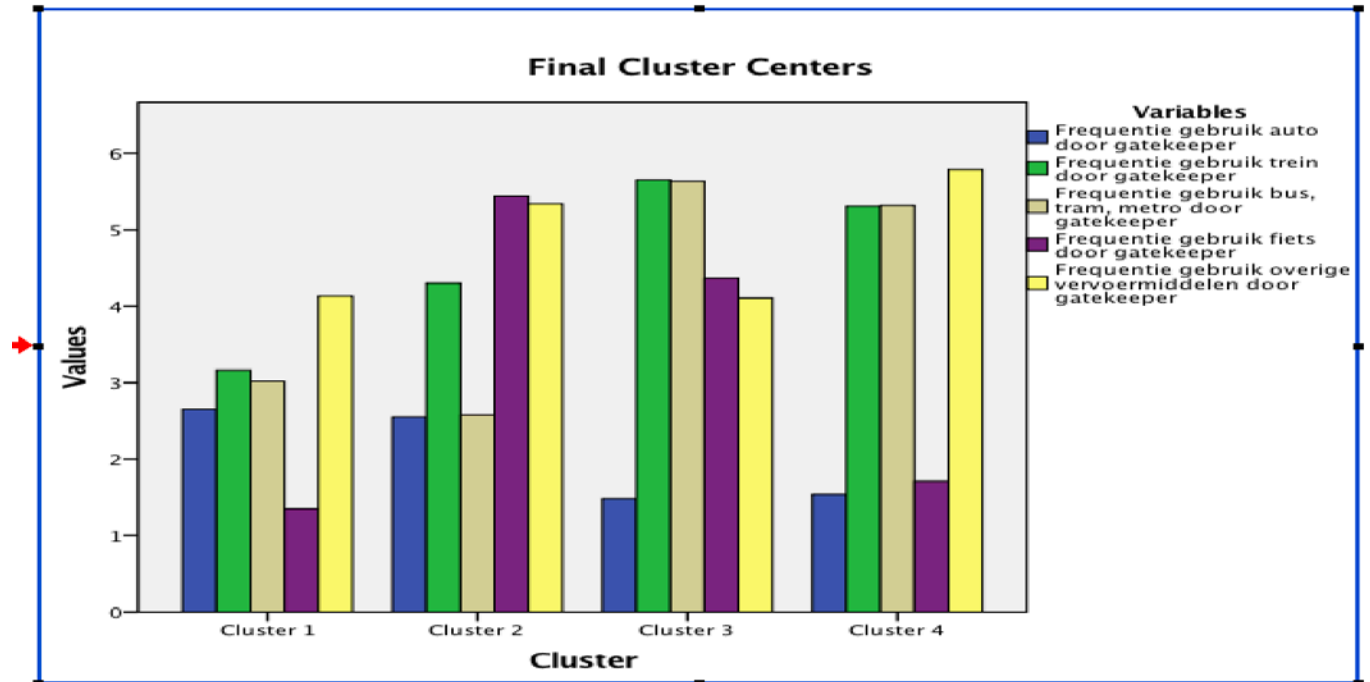
>Approach : Class Cluster Analysis

>Data : MPN

1. Class

2. Predict

3. Supply

Final Cluster Centers

Variables
- Frequentie gebruik auto door gatekeeper
- Frequentie gebruik trein door gatekeeper
- Frequentie gebruik bus, tram, metro door gatekeeper
- Frequentie gebruik fiets door gatekeeper
- Frequentie gebruik overige vervoermiddelen door gatekeeper

ANOVA

| | Cluster | | Error | | | |
	Mean Square	df	Mean Square	df	F	Sig.
Frequentie gebruik auto door gatekeeper	329.094	3	1.291	3568	254.937	.000
Frequentie gebruik trein door gatekeeper	1206.398	3	.978	3568	1233.382	.000
Frequentie gebruik bus, tram, metro door gatekeeper	1647.411	3	.906	3568	1818.365	.000
Frequentie gebruik fiets door gatekeeper	2176.948	3	.958	3568	2271.795	.000
Frequentie gebruik overige vervoermiddelen door gatekeeper	786.851	3	2.290	3568	343.547	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to

>Healthy

>Environmentally and Reduce Congestion

>Optimize the Feeder service Network

>To reinforce the use of train by improving the access and egress parts in a smart way

1 Will you support the idea ?

2 What are the difficulties we will face in practice?