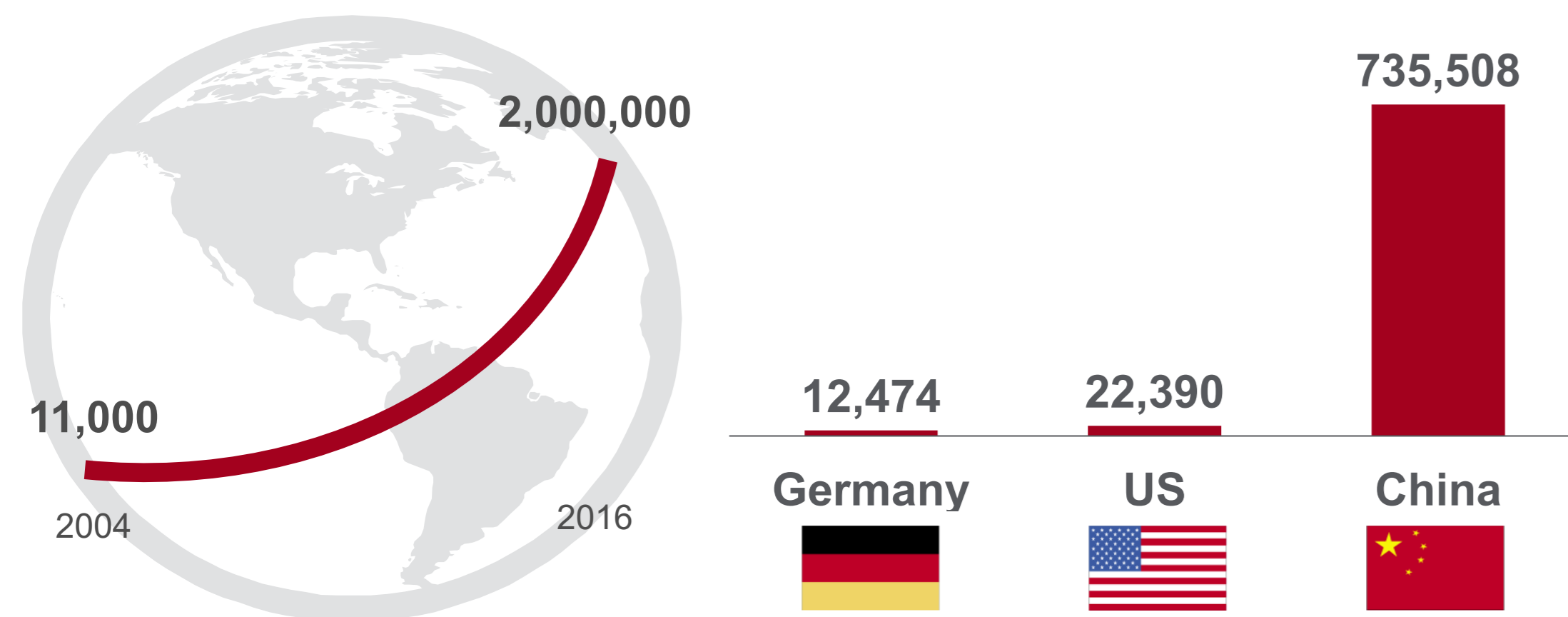


Forecasting the Demand of Bike-Sharing Services in Beijing

Motivation / Background

of shared bicycles



- High population density in cities requires sustainable transportation alternatives

Key Question

- Which factors drive bike-sharing demand in Beijing?



Individual
Age, income



Societal Norms
Policies



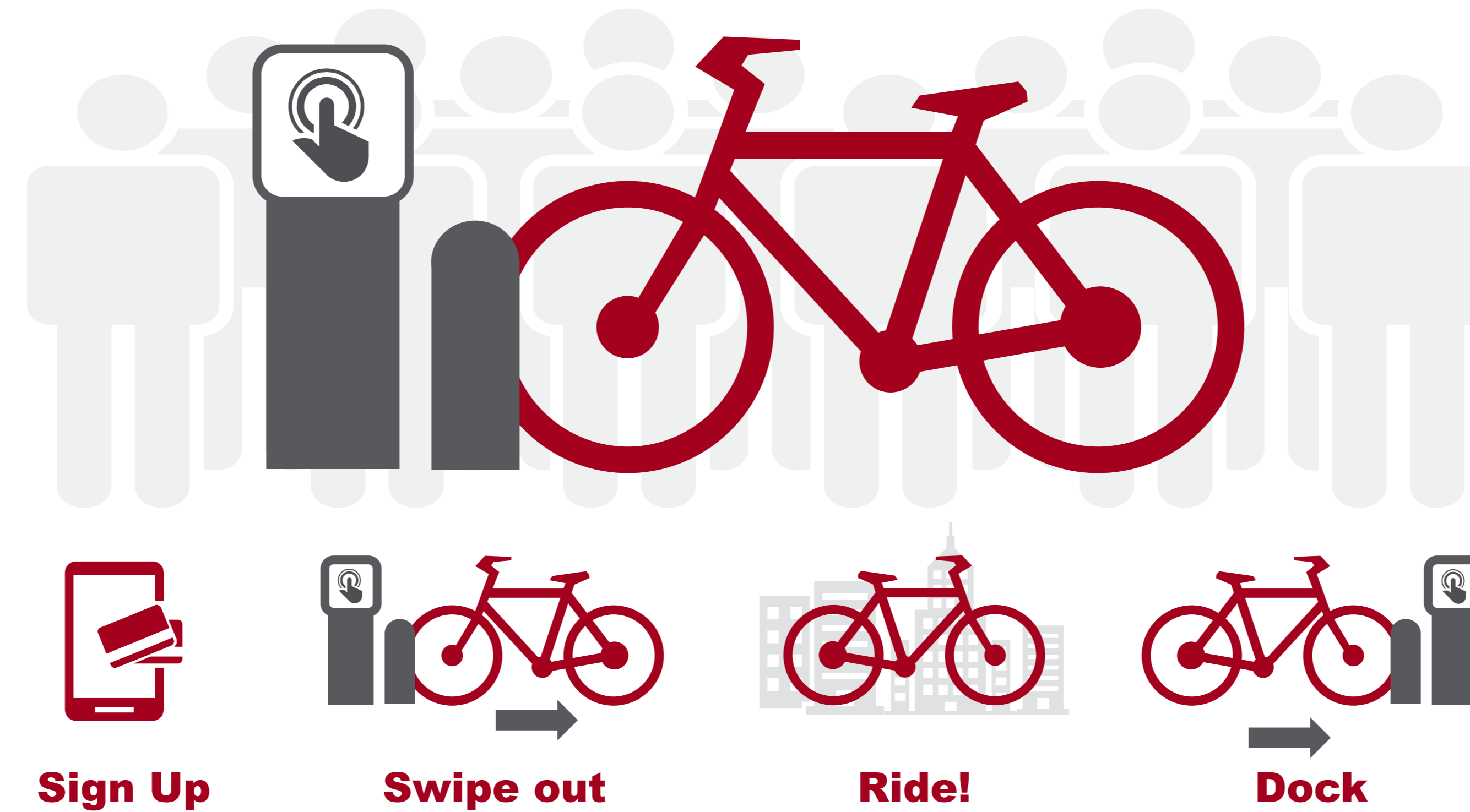
Infrastructure
Bike-lanes



Others
Weather

Relevant Literature

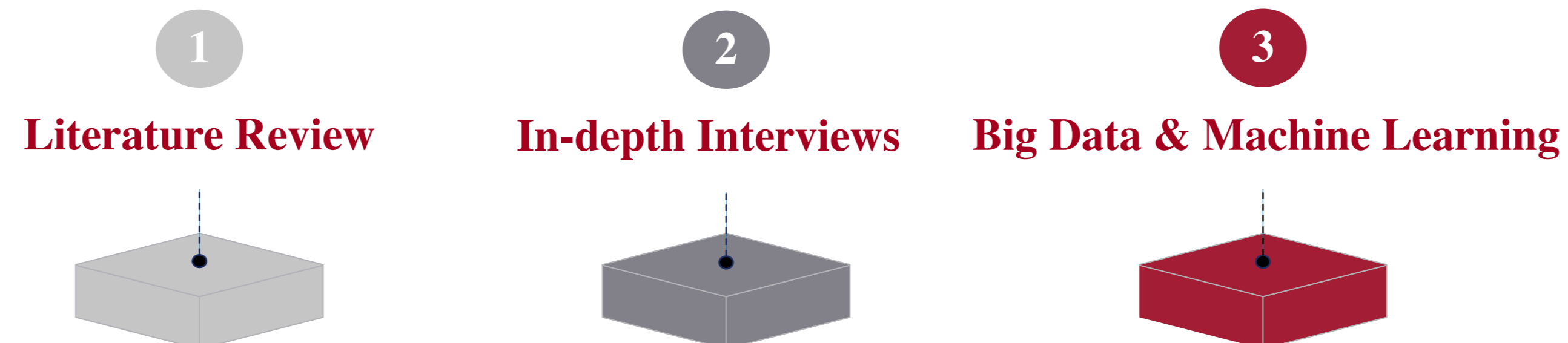
- DeMaio 2009: 'Bike-sharing : History , Impacts , Models of Provision , and Future'
- Shaheen, Guzman, and Zhang 2010: 'Bikesharing in Europe, the Americas, and Asia: Past, Present, and Future'
- Fishman, Washington, and Haworth 2013: 'Bike share: a synthesis of the literature'



The Problem



Methodology



Expected Contribution

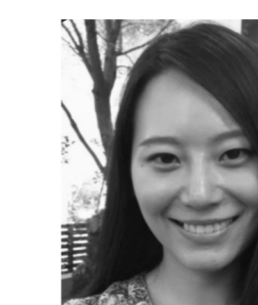
- | | | |
|--|--|--|
| <p>TalkingData</p> <ul style="list-style-type: none"> ➤ Insights commercial market ➤ Data analysis & machine-learning models ➤ Transferrable to other cities | | <p>Bike-Sharing</p> <ul style="list-style-type: none"> ➤ More accurate and holistic demand forecasting ➤ Rebalancing optimization ➤ Transferrable to other commute types |
| <p>Public Sector</p> <ul style="list-style-type: none"> ➤ Urban transportation analytics ➤ Policy - making | | |

Initial Results

- | | |
|---|---|
| <p>10100
01010
00100</p> <p>Database</p> | <ul style="list-style-type: none"> ➤ Integrated data from various public source ➤ Collected data from TalkingData w/ review of schema and sample data |
| <p></p> <p>Insights</p> | <ul style="list-style-type: none"> ➤ Government's ban in 2017 ➤ Price and promotion policies ➤ Impact of pollution questionable ➤ City infrastructure |

Project Team

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