

亞洲城市公共自行車之發展Public Bike System and Marketing-Bike Sharing
System in Asian Cities

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摘要

Public Bike Schemes (PBS) have grown significantly in popularity over the last several years, there are more than 30 countries, 135 cities, over 200,000 public bikes worldwide. Many major European cities and Asian cities have launched extensive schemes that are helping to redefine the perception of cycling and create a new form of mainstream public transport for short distance in urban journeys.

Through the largest schemes in Hangzhou with 50,000 public bikes and Shanghai with 28,000 public bikes in China, the Mainland China has become the largest PBS country in the world. Until 2010, there were more than 60% of public bikes implemented in Asian cities. However, researches and cases studies have been focused on European and American cities, public sectors and research academies have been ignored and neglected the importance of the fast growing phenomena of public bike schemes in Asia.

This project will be followed the final harvest results from the last two years. Since the green-transportation operating systems and business models of PBS are various and are depended on the diverse continental geography and culture case by case, this research will be focused on the cross-cultural comparison at country' s and city' s bases to differ the key factors between different regions. Furthermore, this project will also be focused on the studies to consider the characteristics of users (from demand side) and the PBS' s key index performances (supply side) in Asian, European, and American Cities within two year-period works.

By using data mining technique, this comprehensive comparative research results will be detected the factors' correlation, and will be provided a set of valuable information for evaluating the performance of Public Bike Schemes (PBS) in European, American, and Asian cities. The preliminary results showed the followings: (1) There are many PBS which differ from

each other very much in Europe and Asia, but in America there are few. (2) The difference of these PBS is resulted not only from the population scale in cities, but also the spatial pattern of the cities. (3) In Europe where PBS was well-developed, people will pay more for PBS service, and both the usage rate of PBS and bike trips were high. It seemed that market mechanism of PBS was gradually introduced in Europe but in other regions it still needed the promotion strategies from national government and local authorities. (4) The advertisement revenue is the main financial source of PBS and its potential needs to be investigated. (5) In Asian cities the PBS should provide more bicycles for each location because their higher population density.

關鍵字：Public Bicycle Scheme (PBS), Data Mining, Comparative Study