Will Dockless Share Bikes, a Chinese Innovation, be Successful in D.C.?

October 5, 2017


It has been two weeks since several dockless bike-sharing services made themselves available to Washington, D.C. residents. China-based Mobike, in addition to LimeBike and Spin – both based in California – have dispatched their fleets of bikes around the capital, providing a new option for area residents to navigate the city.

Dockless bike sharing first emerged in China last year. Currently, more than 16 million shared bikes are deployed in Chinese cities. In an article published in early August, Xinhua claimed that China had “four great innovations” in modern times, dockless bike sharing being one of the four. The significant breakaway from traditional bike sharing services is the utilization of QR code and GPS technology to create a remote dockless system for parking bikes. Instead of having to return bikes to designated docks, users are able to park wherever it is legal to do so. This gives users greater flexibility in deciding when and where to rent a bike, in addition to sparing them the inconvenience of arriving at a full dock and then having to find another at which they can return a bike.

The District of Columbia’s Department of Transportation permitted each company to deploy up to 400 bikes during the trial period. As this is a new form of bike sharing in the city, it is unclear whether
Dockless bike sharing could complement or even replace the existing Capital Bikeshare. While there is potential for such success, dockless bikes could also create many problems.

One problem is how to ensure that the deployment of bikes meets users’ demand. The companies must determine the optimal locations to deploy the fleet, such as near metro stations, major bus hubs, college campuses, and business areas. The companies must also maintain a staff of workers who travel around the city to collect and re-deploy bikes that have been left in inconvenient locations. If the companies are unable to shift bikes from locations of low demand to those of high demand, they are in effect eliminating the convenience of the system and leaving users in areas of high demand with no bikes nearby.

The dockless system also presents more challenges to local governments. In China, the poorly regulated deployment of dockless bikes has resulted in many inconvenient situations in major cities. These include clogged sidewalks and chaotic subway stations where bikes are parked randomly; worsening traffic conditions where the street design is not biker-friendly; and enormous numbers of bikes confiscated by the authorities for violating parking rules are all common issues. Problems have gotten so bad that Beijing and Shanghai municipal governments have suspended any further deployment of dockless bikes. The number of dockless bikes in D.C. has not yet reached a scale that will present a major problem to city management since it is still in its trial period. But to maximize the benefit of dockless bike sharing, the fleet scale must expand to cater to users’ needs. If the scale increases in the future, it will create a challenge for the D.C. government to effectively regulate chaotic parking.

Other problems caused by the dockless system include vandalism and bike theft. A Singapore-based bike sharing company found many of its bikes at the bottom of Yarra River shortly after it launched its service in Melbourne, Australia. A startup company called Wukong Bikes was forced to declare bankruptcy in June 2017, after only five months of operation, because 90 percent of its bikes were stolen. In response to theft, some Chinese bike sharing companies have increased the deposit required of bike renters. None of the companies currently operating in D.C. requires a deposit; if that requirement were to be implemented, it would introduce the challenge of managing those deposits.

Perhaps most importantly, information security remains a problem. Customer’s privacy and personal information are vulnerable in the age of digitalization, especially since government policies could further
result in the legal seizure of private information that has been collected by Internet companies. To use the bike sharing service, individuals need to register their accounts through a smartphone app. Given growing concerns about cyber security and privacy issues, it is important to consider how comfortable users are in sharing their personal information with bike sharing companies. For Mobike specifically, many American users may be concerned about a Chinese company having access to their information because of the possibility of that information being shared with the Chinese government. Indeed, another Chinese company, Tencent, has expressed its readiness to share users’ information with the Chinese government to comply with domestic laws. Tencent owns the messaging tool WeChat, which had 963 million active users globally as of June 2017.

While this new system of bike sharing could bring benefits to the residents of D.C., it still faces many obstacles that may hamper its reception.

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Additional Resources


Emma Lee. “Updated: WeChat’s privacy policy update draws attention to information shared with the government.” Technode. September 19, 2017.


Josh Horwitz. “Chinese cities are saying ‘enough already’ to bike-sharing services run rampant.” QUARTZ. August 22, 2017.


Statista. “Number of monthly active WeChat users from 2nd quarter 2010 to 2nd quarter 2017 (in millions).” Accessed on October 5, 2017.

