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AUTOMOTIVE & INDUSTRIAL

JANUARY 2018

AlixPartners global shared mobility survey: racing into the robotaxi future

Despite the occasional controversy and a regulatory environment that varies from market to market, car sharing and ride hailing are here to stay. The benefits of increased mobility, lower costs, and higher vehicle utilization are indisputable, whether you drive yourself, as in car sharing, or someone else does, as in ride hailing. Equally certain is shared mobility's disruptive effects on the taxi and mass transit sectors, as well as even the entire auto industry.

To better understand the current state and future prospects of shared mobility, we conducted a survey of more than 5,000 consumers aged 16 years and older in major cities in seven key markets: China, France, Germany, Italy, Japan, the United Kingdom, and the United States. Our results show that the usage of shared mobility services varies considerably from market to market depending on several factors such as a market's maturity, its urban density, how strictly sharing is regulated, and the public's perception of sharing's value and risks. But overall, we discovered that the urban public in most markets expressed clear preference for ride hailing over car sharing.

The full impact of shared mobility has yet to be felt, but shared mobility is already affecting car ownership rates. More than half of European respondents say they have put off buying a car thanks to such services. Every car-sharing vehicle in the United States replaces 19 vehicles, and each ride-hailing vehicle replaces 4 vehicles. Looking more deeply into the future, we found that users of shared mobility services will be far more likely to accept the prospect of self-driving robotaxis.

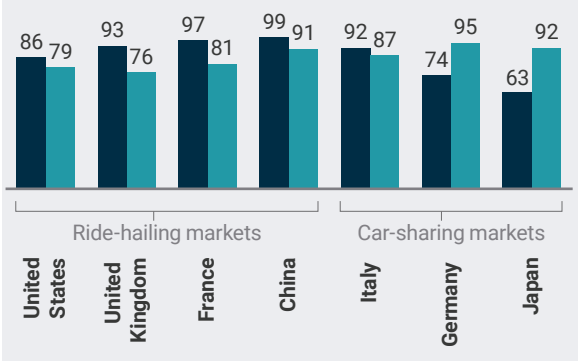
The popularity of shared mobility—and especially ride hailing—is rising fast. And the many players with stakes in the future of the industry—including car-sharing and ride-hailing companies, auto manufacturers, and technology firms—are already jockeying for positions to capture the most value. Who will come out ahead remains to be seen.

> Overall, our data shows that ride hailing is beating out car sharing in the shared-mobility race around the world.

ON THE ROAD TO THE SHARING ECONOMY

First, the big picture: awareness of car-sharing and ride-hailing offerings is now nearly universal among urban consumers in every market we surveyed. Knowledge of ride hailing ranges from a high of 99% of respondents in China to a low of 63% in Japan. Car sharing follows a similar pattern, reaching a high of 95% in Germany and down to a low of 76% in the United Kingdom (figure 1).

FIGURE 1: AWARENESS OF CAR AND RIDE SHARING ACROSS KEY MARKETS



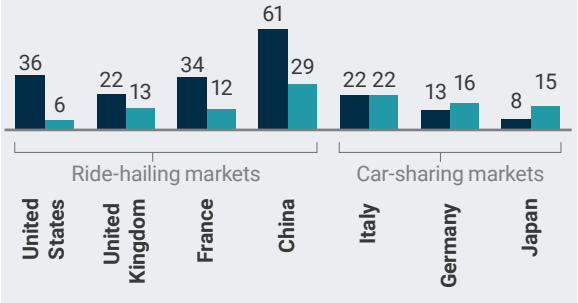
Ride hailing Car sharing N = 5,046

Source: AlixPartners Car Sharing Survey May/June 2017

The results correlate closely with reported usage patterns. Consumers in countries with higher levels of awareness of one of the sharing models naturally use that model with greater frequency. As a result, we categorize six of the seven markets we studied as either ride-hailing markets (the United States, the United Kingdom, France, and China) or car-sharing markets (Germany and Japan). Italy stands somewhere in between, with virtually equal levels of ride-hailing and car-sharing awareness and usage (figure 2).

A preference for either car sharing or ride hailing appears to be caused largely by how strongly the latter is regulated in each market. In Germany and Japan, for example, ride hailing is regulated at least as stringently as traditional taxis are, thereby suggesting the reason that car-sharing awareness dominates in those countries. The reverse is true in the United States, the United Kingdom, and France, where looser regulation has driven ride-hailing usage well past car-sharing usage.

FIGURE 2: MOBILITY SHARING USAGE ACROSS KEY MARKETS DURING PREVIOUS THREE MONTHS



Ride hailing Car sharing N = 5,046

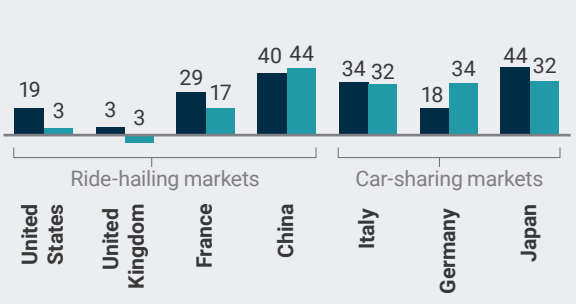
Source: AlixPartners Car Sharing Survey May/June 2017

RIDE HAILING ON THE RISE

Overall, our data shows that ride hailing is beating out car sharing in the shared-mobility race around the world. When asked which they prefer, 41% of respondents chose ride hailing, whereas just 14% said they preferred car sharing—a considerable swing, especially given that ride hailing continues to be carefully regulated in several markets.

The preference for ride hailing is particularly strong in the US. With 42% of city dwellers already using ride hailing, it has effectively become mainstream. And ride-hailing usage is likely to keep growing—if somewhat slower than it has grown in the past. Among current users in the US, 24% say they expect to use ride hailing more in the next 12 months than they have in the past, and just 5% say they will use it less, for a net increase of 19% (figure 3).

FIGURE 3: NET EXPECTED CHANGE IN RIDE HAILING AND CAR SHARING USAGE IN THE NEXT 12 MONTHS



Ride hailing Car sharing N = 5,046

Source: AlixPartners Car Sharing Survey May/June 2017

On the other hand, car-sharing usage in the US has actually fallen from 15% to just 8% since our most recent car-sharing study in 2013, with little or no expected growth. Meanwhile, Zipcar, the most popular US car-sharing company, has seen its customer base decline since its peak in 2016.

The results in European markets are more mixed and appear to depend largely on each market's degree of ride-hailing regulation. Like the US, the lightly regulated UK market is already quite mature. But ride hailing is expected to keep growing, whereas car sharing is on the decline. In France, too, respondents show a distinct preference for ride hailing, with an expected net gain of 29%. Even in Italy, where it is moderately regulated, the expected net gain was 34%. Only in Germany, where ride hailing is quite heavily regulated, is car-sharing usage expected to outpace ride-hailing usage.

In Asia, by contrast, demand for both ride hailing and car sharing remains strong. China continues to lead the way with the most users of both modes and the highest expected net increases in usage in the next 12 months. China is followed closely by Japan, where far fewer people use either service; but the expected increase is almost as great as in China, especially for ride hailing.

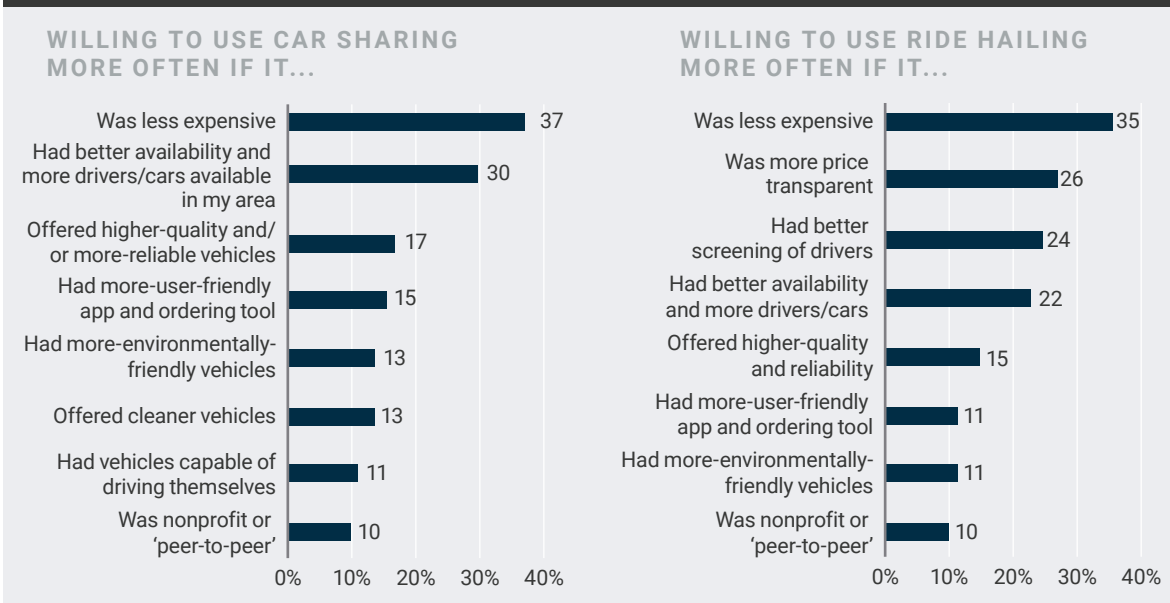
GROWING PAINS

Despite such impressive gains, there's still room for growth. But how can car-sharing and ride-hailing companies continue to grow and provide differentiated offerings? We asked respondents to pinpoint the factors that would encourage them to use each service even more.

In the case of ride hailing, price was the primary factor holding back growth. Respondents, likely feeling burned by the prevalence of surge pricing, say both lower costs and greater pricing transparency would lead to greater use (figure 4). The next most commonly cited factor is better driver screening—no surprise given the media attention to a few incidents of criminal driver behavior. Still, a majority of respondents in every market except the UK and China say they would support less regulation of ride hailing, not more.

Lower cost would also promote greater usage of car sharing, respondents say. But they were almost equally concerned about car sharing's lack of available cars, which suggests that usage would likely rise if more cars were available to users when and where cars are wanted and if car-sharing companies offered higher-quality and more-reliable cars.

FIGURE 4: FACTORS LIKELY TO INCREASE SHARED-MOBILITY USAGE



N = 5,046

Source: AlixPartners Car Sharing Survey May/June 2017

SHARING'S WIDER IMPACT: A SPARK PLUG FOR ROBOTAXIS

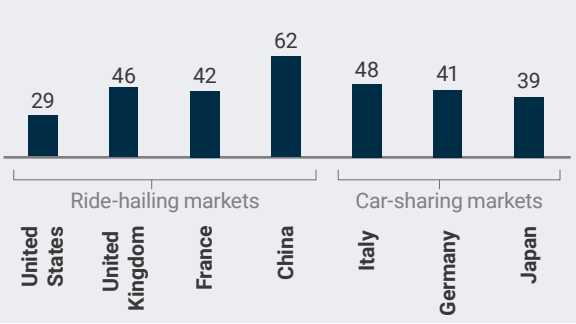
As shared mobility grows in popularity, its impact will likely extend well beyond how people move around in the world's cities. For example, shared-mobility services are already affecting consumers' car-buying decisions. Our analysis of the US market suggests that every car-sharing vehicle on the road replaces 19 vehicles on the road and that each available ride-hailing car replaces 4 vehicles. European markets seem to be feeling similar effects. Fully 55% of ride-hailing users and 57% of car-sharing users in the UK, France, Germany, and Italy say using the service has enabled them to postpone a vehicle purchase—or even avoid one altogether.

Mobility services are also having an impact on whether or not people bother to learn to drive at all—an especially surprising trend in the US, where driving has long been seen as a birthright. For instance, 9% of US millennials report that ride hailing has enabled them to put off getting a driver's license, which will likely cause them to delay buying their own cars. Our analysis of US driver's licensing trends suggests that if the same proportion of the US population had driver's licenses in 2017 as it did in 2000, there would have been an additional 10 million drivers and 12 million more cars on the road.

Does willingness to try ride hailing also correlate with willingness to try robotaxis—the inevitable, if controversial, next step in mobility services? The answer, for the most part, is yes. Overall, 59% of consumers in our survey across all seven countries who have tried ride hailing say they would be willing to take rides in robotaxis, compared with just 37% of those who have never tried it.

Those results, however, appear to depend largely on the relative maturity of each market. Consumers in China, for example, were by far the most willing to try robotaxis, at 62%, whereas consumers in the US, a significantly maturer auto market, were the most conservative, with just 29% indicating willingness. That suggests that the introduction of robotaxis will be met with considerably more resistance in markets in which driving and the ownership of personal vehicles have long been ways of life. Shared-mobility companies will likely have to work much harder to overcome consumers' concerns if robotaxis are to succeed in those markets.

FIGURE 5: WILLINGNESS TO USE ROBOTAXIS AMONG ALL CONSUMERS



Yes N = 4,627

Source: AlixPartners Car Sharing Survey May/June 2017

ALONG FOR THE RIDE

The overall picture of the current and future states of shared mobility suggests that the entire personal-transportation sector is shifting away from ownership of personal vehicles. Car sharing and ride hailing are having real impacts not only on how people get from place to place but also on how they view the automobile and its role in society. Those impacts are happening now and will happen in the future as well. Lower costs and convenience, especially in urban areas, are understandably proving attractive to both users and government policymakers. And that attraction in turn will affect all of the stakeholders in the auto and transportation industries.

As time goes on, people will likely see the car not so much as a personal possession as it is an economic decision whereby the lower overall cost of shared vehicles wins out more and more often. The high cost of parking, fuel, and maintenance will likely discourage ownership in cities first, followed by suburbs, where the ownership of a second or third car—and a car for the children—will also decline.

In the short term, fewer personal vehicles will be clogging city streets because the streets will be replaced by fleets of shared cars. Longer-term, once the autonomous vehicle becomes viable and the cost of the driver disappears, shared mobility will increase dramatically. Robotaxis and shared autonomous vehicles will explode in popularity—again, especially in urban areas—as cost per mile declines by 50% or more.

A key question remains, however: Who will capture the most value under the new scenario? Already, many auto manufacturers and suppliers are making large investments in the development of autonomous vehicles as an entrée to future sales. But who will buy them remains unclear. If a considerable portion of their sales volume shifts to fleets, auto manufacturers might not maintain their current role as the top-of-mind brands with consumers. Technology companies such as Alphabet's Waymo and Apple have also joined the race to the driverless future in the hope of building many of the systems that autonomous cars will use.

In their own bid to remain relevant once autonomous technologies become mainstream, some of the car-sharing and ride-hailing companies, too, are investing in research into driverless cars. Car-sharing companies have already developed the skills to manage fleets, which gives them a head start in the race to control the robotaxis of the future. But ride-hailing companies are already benefiting from the considerable, and constantly growing, popularity of this transportation mode; and their knowledge of market demand, their understanding of customers, and their expertise in route dynamics put them on the starting blocks as well. Plus, many partnerships have developed between ride-hailing companies and auto manufacturers or technology firms in the past few months.

So far, it is unclear which of the many players—auto manufacturers, technology firms, and car-sharing and ride-hailing companies—will win the race to capture the most value. **A**

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