The future of mobility in post-COVID-19 India

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Executive summary

The mobility landscape is rapidly changing in India. Several drivers in mobility have emerged in recent years, from electrification and connected cars to data monetisation and Mobility as a Service (MaaS). All this comes in the backdrop of rapid urbanisation and concomitant challenges like pollution and traffic congestion that have placed the focus on mobility solutions. India has all the ingredients to emerge as a global leader in new and innovative mobility models such as MaaS, given its young demographic that is technologically savvy, connected to the internet, and upwardly mobile.

COVID-19 represents an inflection point in the evolution of India’s mobility systems. The pandemic has caused significant disruption to businesses across sectors. India’s automotive and mobility sectors, already reeling from a slowdown before the pandemic took hold, have been among the worst hit as lockdowns and other restrictions have curbed travel and constrained consumer spending. While the road ahead may be rocky, the current crisis has accelerated changes that will reshape the automotive and mobility landscape going forward.

The need for social distancing, safety and personal hygiene, for instance, will likely drive demand for personal mobility solutions. Consumers are expected to prefer private vehicles over public transport. In the long term, however, the growth is likely to plateau given the adoption of other mobility models.

Clear themes are likely to emerge as personal mobility solutions make a comeback.

- There will likely be a shift towards affordable personal mobility solutions such as entry-level cars, two-wheelers, and ride hailing. Small-format mobility, which includes two wheelers and three wheelers, has bounced back in recent months. Rising demand for last-mile delivery could also emerge as a driver for small-format mobility, especially two-wheelers.
- The organised used car market is likely to be given a fillip as customer acceptance grows. The used car market, which is about 1.2 times the new car market in India, has notched consistent growth over the years. Used vehicles offer a compelling price-value proposition, as consumers are often unable or unwilling to pay high upfront costs associated with the purchase of new cars.
- Customers are likely to prefer online purchases, as comfort with contactless purchases increases. According to a recent survey, around 25 per cent of customers are now willing to use digital channels to buy vehicles.
- MaaS has been gaining popularity in India, owing to its appealing cost economics and convenience. Before the pandemic, mobility as-a-service model was expected to grow significantly vis-à-vis traditional mobility model.

There are two main models of MaaS:

- **Shared mobility**, which refers to the shared use of a vehicle. When shared with multiple passengers, it is known as “ride sharing” and when the vehicle is not shared, it is known as “ride hailing”. This model is expected to witness a moderate drop in the immediate term owing to the lockdowns and slow recovery path, but the “Mobility-as-a-Service” model is here to stay given the growing preference for an asset-light lifestyle.

- **Subscription model**, in which a vehicle is temporarily owned through monthly rentals. The car subscription model is still in its infancy in India, but the pandemic could represent an inflection point for its adoption as it provides:
  - Access to premium cars for monthly rentals that are lower than the monthly EMIs in case of a purchase
  - Extended and flexible plans along with easy cancellations

While there are likely to be many challenges in the near term, the current crisis presents an opportunity to think about new and innovative business models. To weather the downturn, industry players will need to take note of current trends and respond effectively as well as rapidly. Taking a long-term view and adopting new innovative models could ultimately be key to emerging stronger in the next normal.
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Mobility modes in India

Buy/Personal Mobility
Refers to the purchase of a vehicle (car or bike) up front resulting in personal ownership.

Mobility-as-a-Service (MaaS)
On-demand mobility service – driven by convenience, cost economics and hassle-free rides.

Shared mobility
Shared use of a vehicle on a need basis without personal ownership

- **Ride hailing**: Rider hires a vehicle and a driver for personal use – ride is not shared (e.g.: Uber)
- **Ride sharing**: Rider shares the vehicle with other riders travelling in the same direction / area (e.g.: UberPool)

Subscription
Ownership of a vehicle through monthly rentals or subscriptions

- **Self-drive**: Rider hires a vehicle for personal use for ‘self-driving’. (e.g.: Zoomcar) from car rental companies
- **Offerings by OEMs**: Subscription offered by OEMs in partnership with firms such as ALD automotive, Myles.
Introduction to modes of mobility in India

Mobility landscape and adoption in India

Vehicles have traditionally been the second-costliest physical asset (after a house) that middle-class Indians own. Car ownership in India is still seen as a status symbol. However, a host of factors—such as congested roads, inadequate parking, volatility in fuel prices, high interest rates, lack of credit history, rising insurance premiums, and an economic slowdown— are prompting consumers to put off car buying decision. We were seeing a move away from “asset ownership” especially in the pre-Covid era, as consumers gradually embraced newer mobility models.

Personal mobility: Even before the pandemic took hold, the auto industry faced one of its most difficult periods as sales of cars and SUVs recorded the biggest decline in more than two decades in 2019. Rising uncertainties, difficult financing, and the economic slump kept buyers away, despite heavy discounts.

There has been a shift towards small-format mobility in recent years. The penetration of two wheelers in India has increased from 39-40 per cent in 2010 to ~60 per cent in 2019. This COVID-19 pandemic is expected to further accelerate this trend.

In contrast to the slowdown in the new car market, India’s used car market has witnessed a growth over the years, owing to a slew of factors including reluctance to invest in a new car during an economic downturn, value consciousness, better quality of vehicles coming into the used-car market and increased penetration of organised players. There remains immense scope for growth in personal mobility in India, where the market is largely underpenetrated with just 22 cars per 1000 people.

Shared mobility: Rapid urbanisation and increasing congestion in cities have paved the way for the development of a strong shared mobility ecosystem. India has all the ingredients to emerge as a global leader in shared mobility. Several factors—including familiarity with shared services, improving digital infrastructure, a young demographic and a vibrant entrepreneurial culture—support India’s opportunity to meet transportation demand with shared mobility solutions. Shared mobility offers several potential benefits, arising from an increase in system efficiency through higher asset utilisation and better connectivity. Shared mobility’s ‘per km’ cost is lower than private cars’ and equivalent to that of three-wheelers. Therefore, the transition to shared mobility is gaining momentum.

Among the shared mobility models illustrated in the graphic preceding this section, ride hailing has emerged as one of the most popular model in India, as taxi-hailing apps have increased their footprint across the country in recent years. Leading cab aggregators operate in more than 100 cities, but they focus mostly on metro cities. Over 75 per cent of business for shared mobility operators comes from the top seven metro cities.

Subscription model: Leasing and subscription models are fast gaining popularity among Indian millennials, who seek greater flexibility and convenience. The shift towards “asset-light” lifestyles is driving demand for such models. As the global economy faces a recession in the wake of the COVID-19 pandemic, subscribing a car may be seen as a smarter choice than buying one. The subscription models work out to be significantly cheaper than payments on car EMIs and insurance premiums and offer greater flexibility to the consumer.
The future of mobility in post-COVID-19 India

### Cars per 1,000 individuals – India

<table>
<thead>
<tr>
<th>Country</th>
<th>2015</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>364</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>181</td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td>174</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>87</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>

*Low penetration reflects a huge scope*

### Share of shared cabs in total cars market

<table>
<thead>
<tr>
<th>Year</th>
<th>Share of shared cabs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>8-10%</td>
</tr>
<tr>
<td>2019</td>
<td>13-15%</td>
</tr>
</tbody>
</table>

### % of car parc under subscription model

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>45%</td>
</tr>
<tr>
<td>US</td>
<td>33%</td>
</tr>
<tr>
<td>Germany</td>
<td>32%</td>
</tr>
<tr>
<td>France</td>
<td>15%</td>
</tr>
<tr>
<td>India</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

*Higher preference towards ownership*

### Personal Mobility

- **2W penetration** in India increased from 39-40 per cent in 2010 to ~60 per cent in 2019
- **Used car market** in India is ~1.2x of new car market. Reluctance to pay high upfront cost to purchase new cars has made used vehicles a compelling price-value proposition.

### Shared Mobility

- **Ride hailing is the most popular model; Ride sharing (car-pool, bike taxi etc.) is slowly picking up**
- Volume of shared rides are consistently growing and the trend is likely to continue
  - ~3.5 mn rides were recorded in 2018: ~21 per cent increase over 2017.

### Subscription Model

- ~0.6 per cent of overall car subscriptions are < 2 yrs old
- A shift towards “Asset light” lifestyle and flexibility to upgrade the vehicle model are the key factors likely to drive the market
  - OEMs have started offering subscriptions directly or in partnership with platforms such as ZoomCar, Revv etc.

Before pandemic took hold, the mobility as-a-service model was expected to grow significantly driven by convenience, cost economics and a hassle-free ride experience.

The share of privately-owned vehicles was expected to decline in the medium to long term due to the adoption of newer mobility models.

Shared miles were expected to rise to 35 per cent by 2030. Clear regulations were expected to encourage service providers for increased participation.

Subscription model was expected to witness a growth of 5-6 per cent Compound Annual Growth Rate in five years.
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Impact of COVID-19 on consumer behavior

While COVID-19 has snowballed into an unprecedented economic and healthcare crisis, it has accelerated several trends that will fundamentally alter the mobility landscape.

Analysing the impact of the pandemic in China, the initial epicenter of the virus outbreak where daily mobility patterns and attitude towards vehicle purchase have changed in the wake of the pandemic, can provide context to what might be expected in the Indian market.

Impact of COVID-19 on auto sales in China

China’s auto sales plunged 81.7% per cent in Feb 2020 at the height of COVID-19 outbreak. As the country recovered from the pandemic, auto sales surged 14.5 percent year-on-year in May 2020 to 2.19 million vehicles\(^\text{16}\), indicating a preference towards personal mobility.

As per a survey in China\(^\text{17}\), consumers showed a higher intention to use personal vehicle due to lack of trust in public transportation and other safety concerns. Moreover, an inclination towards online and contactless purchase was also observed.

What it means for auto manufacturers in China

- The world’s largest car market’s (China) car sales grew for the first time in nearly two years showing signs of recovery after the pandemic struck.
- Chinese and foreign car manufacturers expect the monthly run rate of Auto sales in China to touch pre-COVID levels by Q4FY21 / Q1FY22.

Impact of COVID-19 on mobility preferences and systems

Impact of COVID-19 on consumer behavior

Impact of COVID-19 on auto sales in China

What it means for auto manufacturers in China

Quarterly Passenger Vehicles Sales in China (mn units)\(^\text{19}\)

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>2.7</td>
<td>4.5</td>
<td>5.3</td>
<td>6.8</td>
</tr>
<tr>
<td>2020</td>
<td>-50%</td>
<td>-12%</td>
<td>+2%</td>
<td>+7%</td>
</tr>
</tbody>
</table>

\(^{16}\) China’s auto sales plunged 81.7\% per cent in Feb 2020 at the height of COVID-19 outbreak.

\(^{17}\) As the country recovered from the pandemic, auto sales surged 14.5 percent year-on-year in May 2020 to 2.19 million vehicles.

\(^{18}\) As per a survey in China, consumers showed a higher intention to use personal vehicle due to lack of trust in public transportation and other safety concerns.

\(^{19}\) What it means for auto manufacturers in China

\(^{21}\) The world’s largest car market’s (China) car sales grew for the first time in nearly two years showing signs of recovery after the pandemic struck.

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Impact of COVID-19 on consumer behavior

Emerging mobility trends in India

The trends seen in China could be a harbinger for the Indian market, where the COVID-19 pandemic is expected to significantly alter mobility related preferences in the short to medium term.

Certain trends — increased preference towards personal mobility over ride-sharing, ride-hailing and rentals, and digital payment modes — are expected to pick up pace, especially in the immediate term.

COVID-19 is expected to impact the travel choices of consumers in short term\(^\text{20,21}\)

<table>
<thead>
<tr>
<th>Change in preference of commuters using cabs</th>
<th>Change in preference of commuters using public transport</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image-url" alt="Graph" /></td>
<td><img src="image-url" alt="Graph" /></td>
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</table>

Need for social distancing and safety concerns are likely to shift the preference towards personal mobility in short to medium term...

…However, in medium to long term, the effect on personal choice of transport and PV sales are unlikely to see a large increase because of the following reasons:

- **‘Work from home’** trend to reduce movement for most white-collar professionals
- **Affordability of a four-wheeler is likely to be a constraint** for majority of public transport users. Given the safety and affordability concerns, **two wheeler sales are likely to pick up**
- **Ride hailing will continue to be preferred over ride sharing** owing to safety and hygiene concerns in the immediate term
Post COVID-19 outlook for mobility modes in India

Personal mobility: likely to make a strong comeback

With the need for social distancing and hygiene, coupled with financial constraints, consumers are expected to prefer affordable personal mobility modes.

- According to Cars2413 survey, intention of consumers to use a personal vehicle increased by 41 per cent post COVID-19 especially in major cities
- Nearly 22.5 per cent of consumers who had planned to buy a new car will now go for a used vehicle
- While these statistics indicate a strong uptake in personal mobility in the immediate term, the growth is likely to plateau in the long term.

<table>
<thead>
<tr>
<th>Reasons quoted by respondents for buying a car</th>
<th>42%</th>
<th>34%</th>
<th>20%</th>
<th>18%</th>
<th>18%</th>
<th>12%</th>
<th>3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need a car for the family</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Looking for an upgrade</td>
<td></td>
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<tr>
<td>Driving owned car reduces the chance of infection</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>To allow travel flexibility</td>
<td></td>
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<tr>
<td>Should have a car in case of emergency</td>
<td></td>
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<td></td>
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<tr>
<td>I will be driving more</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cab aggregators and public transportation are not clean</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Outlook for personal mobility

1. **Shift towards affordable solutions**
   - The pandemic is expected to increase the demand for “entry-level cars”, “used cars” and “two-wheelers”
   - Features such as in-built sanitisation and anti-bacterial surfaces are likely to witness an increase.

2. **Shift to organised used car market**
   - Growing customer acceptance and preference of used cars to drive the growth of organised used car market
   - Though small, the organised channel is competitive, with players offering new age solutions.

3. **Preference for online purchase**
   - Online booking of vehicles is likely to witness an increase
   - A number of car manufacturers have started offering contactless online sales. E.g., large auto OEM in India offering VR based purchase experience and home delivery.
Post COVID-19 outlook for mobility modes in India

Personal mobility: likely to make a strong comeback

The shared mobility segment is expected to witness a moderate drop in the immediate term due to a slow recovery post lockdown, but the “Mobility-as-a-Service” model is here to stay given a shift in consumer preference towards an asset-light lifestyle.

Impact of COVID-19 on shared mobility

- A significant drop in the ridership was observed due to safety concerns coupled with nationwide lockdowns (50-100 per cent during various phases)23

- The 10 cities contributing to ~85% business are the most affected ones24

- Implementation of strict hygiene protocols – compulsory masks, frequent sanitization, limited AC services, cashless payments etc. to alleviate concerns.

Slow path to recovery24 – Observations post unlock 1.0

Only 20 per cent recovery in ride volumes so far for the largest car hailing players (full year estimate stands at 50 per cent). The statistics stands at **25-30 per cent for Bike rental startups.**

Key trends expected in the shared mobility segment

- **Ridership to remain subdued till safety concerns are addressed**

- **Increased partnership with corporates or OEMs to improve utilisation of vehicles**

- **Increased penetration of bike taxis given that the safety protocols are followed**

- **Expansion of service offerings to subscription models, premium cab segment etc.**

Shared mobility providers are optimistic about long-term market demand because of a perceived societal and lifestyle shift and by moving to a MaaS model, these providers reduce the burden of owning a vehicle.
Vehicle subscription model – emerging ecosystem

Car subscription model is at a nascent stage in India but the COVID-19 pandemic could be an inflection point for its adoption.

Value proposition offered by subscription model in the times of a pandemic

- Access to **premium cars** at monthly rentals which are lower than monthly EMI’s in case of a purchase
- **Cost economics**
- **Extendibility of plans across cities** provides convenience
- **Flexible ownership**
- **Multi city operations**
- **High-tech features**
- Extended and *flexible plans along with easy cancellations* offered by players to attract customers
- **Access to advanced and high end In-car entertainment services and other gadgets**

In a post COVID-19 situation, players are intensifying efforts to attract customers through **flexible subscription plans**. E.g., Zoomcar launched a plan with deferment of payments, subscription termination without penalties etc.

Outlook for the vehicle subscription model

- **Car subscription model is expected to attract consumers looking for alternatives to shared mobility in the short to medium term**
- **Regulatory clarity around registration policies, insurance claims, and accident accountability, among others could give a boost to this model**

While shared mobility players are exploring the subscription model to stay relevant and as a stopgap to drive sales, the long-term growth of the model is yet to be determined.
Even though OEMs and mobility players face challenges in the near term, the slowdown is expected to be short lived. While personal mobility is likely to gain momentum, shared mobility service providers are developing innovative ways to adapt to the likely shifts in commuting trends. Mobility models that factor in social distancing and good hygiene would be the most suitable options for passengers until a cure or vaccine against COVID-19 is discovered. Players that can customise their current models in line with these requirements are likely to see a surge in demand.

<table>
<thead>
<tr>
<th>Mobility models</th>
<th>Growth outlook (directional)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal mobility</td>
<td><img src="image" alt="Graph showing growth in different time frames" /></td>
<td>With the growing need for social distancing and personal hygiene, consumers are expected to prefer private vehicles in the short and medium term, but the growth is expected to plateau in long term given the adoption of other mobility models.</td>
</tr>
<tr>
<td>Shared mobility</td>
<td><img src="image" alt="Graph showing decline in medium term, followed by growth in long term" /></td>
<td>A moderate drop is expected in the immediate term. Recovery to be seen in medium term and growth to pick up in the longer term owing to consumer preference towards ‘asset-light’ lifestyle and high upfront costs associated with vehicle purchase.</td>
</tr>
<tr>
<td>Subscription model</td>
<td><img src="image" alt="Graph showing steady growth" /></td>
<td>Currently in its infancy in India, the subscription model is expected to gain traction and the pandemic could be an inflection point for its adoption.</td>
</tr>
</tbody>
</table>

**Growth Outlook**

- **High Growth**
- **Flat/Slow Growth**
- **Decline in Growth**
Endnotes

1. China Association of Automobile Manufacturers (CAAM), June 2020
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23. Ola, Uber Demand Down By Half Over Coronavirus Pandemic, Inc42, 19 March 2020; Ola, Uber fares decline as demand falls due to coronavirus, Business Today, 19 March 2020
24. Bumpy ride ahead for Ola, Uber as demand remains weak despite easing of lockdown, ET Tech June 2020
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IN OUR ABILITY TO TRIUMPH OVER ANYTHING
IN OUR SPIRIT OF UNDYING ENTHUSIASM
OUR DRIVE TO ACHIEVE THE EXTRAORDINARY
UNMOVED BY FEAR OR CONSTRAINT
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