



42% of consumers believe their shopping habits will fundamentally change because of COVID-19

according to a 2020 study by EY¹

Consumer Optimism and Spending

Studies reflect overall reduced consumer spending relating to a decrease in consumer appetite for goods and an increase in employment instability (unemployment, temporary, part-time). A 2020 study conducted by McKinsey found that globally, many consumers **expect a decrease in income** in the near future.²

International Monetary Fund (IMF) projects a three percent contraction of the global economy.³

Real GDP is estimated to drop:

5.9% in the United States

7.5% in European countries

5.2% in Japan

6.2% in Canada

6.2% in Eastern Europe

5.2% in Latin America

Further research indicates that optimism largely correlates to consumer spending on a global scale. McKinsey's study¹ also shows reduced optimism across the Americas and Europe since mid-March. Meanwhile, most consumers in APAC countries have maintained or increased their level of optimism since the start of the pandemic.

Migration to Cities

The pre-pandemic rise of urban migration to cities has begun to slow due to the impact from COVID-19.

Up to **2.3 billion** car rides in urban centres are expected to be replaced by MaaS usage each year by 2023

according to a 2018 study by The Research Company⁴

While pre-pandemic trends estimated that 66 percent of the global population will live in urban areas by 2050 (UN), COVID-19 has required many businesses to shift to a work-from-home company culture. With this new lifestyle shift and greater acceptance for employees to work remotely, the need to live in cities close to work has decreased as a job requirement. In fact, trends reveal that specific areas of large cities (commercial areas) will experience some closures requiring time

to reconfigure and consolidate demand zones. Key consumer trends also indicate rising concerns in the safety of public transportation during the pandemic, furthering the slow of urban migration.

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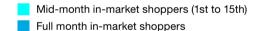
Automotive Trends

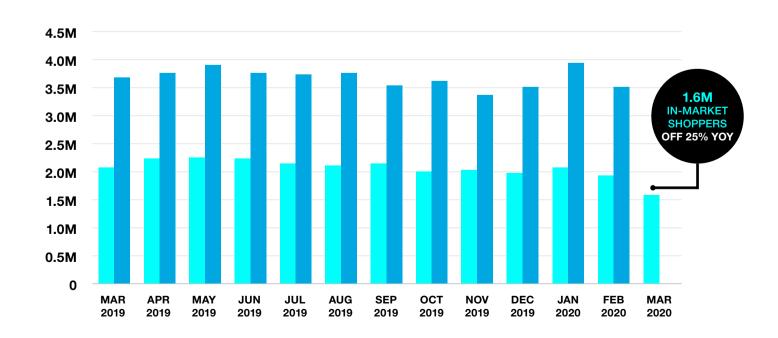
Automotive Industry Impacts

Short-term Auto Sale Decline

An obvious impact of COVID-19 to the auto industry can be seen in the industry's difference in new vehicle shoppers when comparing March 2020 to March 2019. Comscore's Monthly New Vehicle Demand Index records 1.6M in-market new vehicle shoppers in March 2020.⁵

In Market New Vehicle Shoppers







This number is off 25 percent year-over-year (YoY), indicating a short-term decline in sales. According to Forrester, in the United States alone, sales were down 50 percent between March 2019 and March 2020. This decrease in demand and sales will lead manufacturers to explore innovative ways to maintain consumer interest.

Supply Chain

A different Forrester report also revealed the need to update/remodel supply chains,⁷ keeping in mind that more than eighty percent of the global auto supply chain is connected to China, according to KPMG.⁸

Purchasing Decisions

Dealership Visits

According to a 2019 Cox Automotive study, car buyers visit fewer dealerships: making faster purchasing decisions as online research has increased.⁹ With this in mind, the direct-to-

consumer sales model will need to continue to be made a priority, and dealership showrooms should make strides towards a connected experience with VR/AR environments.

Undertaking an Exercise in Rethinking Customer Needs

In this new economy, it is important to detail who the primary auto customer of the future will be as well as what their needs will be. For example, car buying may be more important to businesses and governments than to citizens for the near future.

New Positioning

Amid the outbreak, certain car companies shifted to making ventilators and Personal Protective Equipment. This decision to prioritize public safety over car sales may translate into an uptick in customer loyalty for these brands. While these shifts may translate into increased customer loyalty, the switch from making ventilators back to manufacturing cars means a potential stock shortage. This shortage

provides an opportunity to other companies to position themselves for success.

According to PWC, automotive companies have the opportunity to create a vision of how they see themselves fitting into this evolving market.¹⁰

Increased Demand

While there is currently a decline in vehicle purchases, this pandemic may begin to create

an increase in demand by consumers wanting to own personal vehicles in order to avoid exposure to COVID-19.

New safety requirements on public transportation will make these modes of transportation less convenient, also potentially leading to increased purchasing demand.

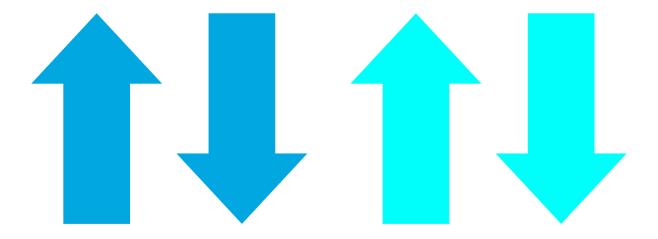
These seemingly conflicting trends are what we call opposing forces. On one hand, there's an increased desire to own vehicles rather

75% of consumers **globally** expect COVID-19 to impact their routines and finances for more than two months

according to a 2020 study by McKinsey²

than risk ride-sharing or public transportation. On the other hand, countries are seeing a decrease in travel demands due to the growing ease and ability to work, shop, learn, socialise, and entertain from home. Another example of

opposing forces is the increase in car supplies while vehicles sit on lots and showrooms remain empty. Additionally, many people expect their income to decrease and are wary of taking on new debt.





Mobility as a Service

Current trends reveal an immediate decrease in demand for MaaS with an increased demand over the long term. These trends also indicate a high demand for private MaaS which is fueled by a desire to avoided crowded public options.

The current climate further sees an acceleration in the adoption of autonomous transport. This acceleration is built on the ability to maintain the health and safety of drivers and passengers, the ability to disinfect vehicles completely between rides, and the demand for product delivery services.

MaaS trends also indicate that AI will connect private and public transport options. The use of AI will lead to improved customer service through digital assistants as well as the optimisation of operational efficiency through predictive analysis of mobility demand.

Autonomous dispatching and operations may better meet the increasing demand as well as dynamic environmental changes. The adoption of artificial intelligence also opens the door to preventative safety and security management using AI powered video analytics.

Additionally, autonomous vehicles are making a bigger footprint than ever before through the need for safe product deliveries. This rising trend offers potential new business model investments. A study released by Gartner reveals an increase in gig economy workers transporting goods as consumers increasingly order delivery rather than travel out to stores, markets, and restaurants.¹¹ The same study further predicts a "leaner industry adapted to a much lower level of global sales. It could be more heavily focused on mobility services as people have put off purchases of new vehicles."

As life continues in this new normal, safety and fewer contact points with other people will continue to be front of mind for everyone. Because of this, Mobility as a Service might see an increased demand for self-driving cars with the intention of eliminating the point of contact with the driver. However, customers will also need to feel confident that these cars will be

disinfected completely and effectively between rides. Alternatively, the continued use of rideshare drivers might bring an increase in demand for cars with optional dividers between the front and back seat. This new need creates an opportunity for a new product or car design.

According to Traffic Tech today, fewer people on the roads "could benefit a more diverse range of transport modes, with authorities prioritising more environmentally-friendly, safety-conscious or budget-minded modes." In this case, the companies that can offer eco-friendly, safe vehicles to other companies offering ride-share services will thrive.

Short Term (Immediate) Actions

In order to get ahead, MaaS companies can immediately adapt an offering for specific customer groups. For example, extend business areas, offer "safe routes" or "reduced fees" for key workers.

They can also offer mode and usage flexibility, enabling and encouraging food, medical supply, or parcel delivery using MaaS mobility supply chains.

These companies can also maintain trust through transparent communication.

MaaS trends "... propose changing business models and investing in small revenue areas that might emerge from a changed world, like flexible ownership models, subscription services and multimodal transportation platforms."

Gartner 11

This means real-time public transport information. Including additional information on departure times, service disruptions, and "over-crowding" are crucial to regaining and maintaining public trust.

Long Term (Sustained) Actions

These companies must also work towards providing higher service experience safety by ensuring individual choice of transportation, such as "open air" transportation (i.e. bikes), and less crowded ride-shares which are frequently disinfected. Additionally, hygiene

information must be displayed for each transportation mode in the MaaS service platform.

Companies must also accelerate multi-modality and add more depth. This means integrating more individual, "open air" transport providers and ensuring completely seamless and digital booking experiences.

MaaS providers must also engage in mobility data sharing. Success means encouraging further, voluntary, standardised mobility data sharing across different mobility providers in order to improve the mobility experience.

Pandemic MaaS Immediate Impacts

March

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Urban Mobility



F-Scooters

-80%

Noticeable decline with limited supply; increasing predatory competition, consolidated players could emerge stronger



Rikes

+8%

Bike usage increasing, as people rely on "open air" active mobility; some usage subsidized by governments



E-Mopeds

-50%

Slight decline as disinfection is more difficult due to helmets and gloves



Ride-share

-100%

Mode stopped completely, only subsidized use for medical workers



Car-share

-47%

Noticeable drop as cleaning efforts are increased, but still used as people prefer individual transport



Public Transport

-92%

Extreme decline as people move away from mass transit



MaaS Trend Predictions

2022-2030

Autonomous shared concepts market in Europe could **increase by 70% per year** – and thus make up more than 25% of mobility forms by 2030. -*PWC*

2030

Autonomous vehicles account for 40% of the personal mileage driven in Europe. -PWC

2031+

City will determine mobility behavior rather than region (ex. the automotive market in New York City will have more in common with Shanghai than with Kansas) -McKinsey

At Valtech, we're working with some of the top brands in the automotive industry, helping to conceptualize and execute the kinds of advancements that have already changed the future of driving.

Whether its integrating Alexa into vehicles, leveraging out in-depth knowledge of connected

cars, or leaning on our history of helping clients with new options for financing, let Valtech work with your team to meet all of your changing Automotive and MaaS needs.

References

Endnotes

¹ Four consumer behavior trends emerge during the COVID-19 pandemic

² Consumer sentiment evolves as the next "normal" approaches

³ World Economic Outlook, April 2020: The Great Lockdown

⁴Helsinki leads in mobility-as-a-service

⁵ Comscore's Monthly New Vehicle Demand Index Analyzes the Impact of COVID-19 on the Auto Industry

⁶ US Shopper Insights And The Impact Of COVID-19

⁷ Coronavirus And Climate Change Reveal Systemic Risk For Third Parties

⁸COVID-19 impact on the automotive sector

⁹ Car Buyers Visiting Fewer Dealerships, Making Faster Decisions as Online Engagement Rises

¹⁰ COVID-19 and the automotive industry

¹¹ https://www.gartner.com/document/3982453



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