E-ISSN: 2583-9667
Indexed Journal
Peer Reviewed Journal
https://multiresearchjournal.theviews.in

Received: 02-02-2025
Accepted: 10-03-2025

INTERNATIONAL JOURNAL OF ADVANCE RESEARCH IN MULTIDISCIPLINARY

Volume 3; Issue 2; 2025; Page No. 369-375

COVID-19 and transportation business in India

[1]Malleshi H and [2]Prof. Y Muniraju

[1]Research Scholar, Department of Commerce, Mangalore University, Konaje, Mangaluru, Karnataka, India
[2]Professor, Department of Commerce, Mangalore University, Konaje, Mangaluru, Karnataka, India

DOI: https://doi.org/10.5281/zenodo.15622774

Corresponding Author: Malleshi H

Abstract

After a year of the COVID 19 pandemic, it is clear that the transport sector was the one that was most negatively impacted economically. The capacity of enterprises to transport passengers from different parts of the world and the freedom of movement were hampered by the travel restrictions that were put in place to stop the virus's spread. Owing to the large decline in transportation earnings, some transportation companies had to close their doors owing to bankruptcy, and as a result, wages for certain employees were reduced. In response to the pandemic, governments in India collaborated with private transport firms by allowing COVID 19 (RT-PCR) tests, allocating areas to serve as quarantine canters, limiting travel, and assisting in the repatriation of citizens to their home countries. Governments and transportation corporations now have the problem of adapting to new norms, taking into account new modes of transportation, the effectiveness of services offered to passengers, giving priority to passenger safety, and most importantly, stopping the spread of the Corona Virus. Transport businesses have to take all essential safety measures in reaction to the pandemic in order to keep both local and international mobility operational. In order to follow safety protocols, such as social seclusion, reviewing COVID 19 test results, and other necessary information, logistics and transport businesses must overcome numerous obstacles because doing so will cause journey time to be extended. The absorptive capacity of the various modes of transportation will be reduced by social isolation and creative queuing management. The transport sector is expected to be the last to recover from the effects of COVID 19 because it was the most exposed and affected sector during the pandemic. How well safety precautions were followed during the first wave of the pandemic will have a significant impact on how quickly transit can be restored.

Keywords: Transportation system, COVID-19 pandemic, public transport

Introduction

The COVID-19 pandemic has significantly affected the transportation business in India. This health crisis, caused by the corona virus, has led to big changes in how people and goods move around. Public transportation, like buses and trains, faced a tough time due to the need for social distancing. Fewer people travelled, and this hit the earnings and operations of public transport. Ride-hailing services, like Uber and Ola, also suffered as people were afraid of using shared transport. This created a hard time for drivers who relied on these services for their income. The pandemic didn't just affect people moving around; it also messed with the movement of goods. Trucks and delivery services faced challenges because of lockdowns and restrictions, disrupting the smooth flow of essential items. Businesses relying on these deliveries felt the impact, facing delays and increased costs.

People's behaviour changed too. Many became wary of shared transportation and started preferring their own vehicles. This shift affected the demand for bikes and small cars. It also raised questions about the future of shared transport services. To deal with these challenges, the transportation industry in India turned to technology. Things like digital ticketing and contactless payments became crucial for making people feel safer. Governments also stepped in with support, offering financial help and adjusting policies to help the struggling industry. In summary, the COVID-19 pandemic brought big challenges for transportation in India. Public transport saw fewer passengers, ride-hailing services faced a decline, and the movement of goods got disrupted. People started favouring personal vehicles, and technology became important to make transportation safer. Government support played a vital role in helping the industry cope with these tough times. As India continues to deal with the effects of the pandemic, understanding how the transportation business

adapts will be crucial for its future.

The history of the transportation business in India is a narrative that has evolved with the country's growth and changing needs. In the early stages of post-independence India, the transportation sector was primarily dominated by traditional modes such as bullock carts, horse-drawn carriages, and manually pulled rickshaws. However, with the advent of modernization and economic development, there was a pressing need for a more efficient and extensive transportation network. The 1950s and 1960s witnessed the establishment of state-owned entities like Indian Railways and state transport corporations, playing a pivotal role in connecting different regions of the country. The Green Revolution in the 1960s further fuelled the demand for an efficient transportation system to facilitate the movement of agricultural produce.

As the economy continued to liberalize in the 1990s, there was a noticeable shift towards privatization and the entry of private players in the transportation sector. This era saw the emergence of private bus operators, taxi services, and the growth of logistics companies catering to the burgeoning demands of an expanding market. The introduction of economic reforms also paved the way for multinational logistics firms to establish their presence in India. In recent years, technology has played a transformative role in shaping the transportation landscape. The rise of app-based cab services, advanced fleet management systems, and GPS tracking have brought a new level of efficiency and convenience to the industry. The government's emphasis on infrastructure development, such as the construction of expressways and the Bharat Mala project, reflects a commitment to enhancing the overall transportation network in the country. Despite these advancements, challenges such as traffic congestion, last-mile connectivity, and environmental concerns persist. The history of the transportation business in India is a dynamic narrative that mirrors the country's socio-economic evolution, and its future trajectory is likely to be shaped by continued technological innovations, infrastructure investments, and a growing emphasis on sustainability.

Transportation plays a pivotal role in the functioning of economies and societies worldwide, serving as a linchpin that connects people, goods, and services across vast distances. The importance of transportation is multifaceted, impacting various facets of daily life, business, and global trade.

Importance of Transportation

Economic Growth and Development: Transportation is a catalyst for economic growth and development. It facilitates the movement of goods and services, enabling businesses to reach broader markets. Efficient transportation systems reduce transaction costs, enhance competitiveness, and contribute to increased productivity. Developing a robust transportation infrastructure is often a key strategy for emerging economies seeking to attract investments and stimulate economic activity.

Global Trade and Commerce: International trade heavily relies on transportation. Ships, planes, trucks, and trains transport goods across borders, connecting producers and consumers worldwide. Ports, airports, and logistics hubs are critical nodes in the global supply chain, fostering economic interdependence and allowing countries to specialize in producing what they do best.

Employment Opportunities: The transportation sector generates significant employment opportunities. From drivers and pilots to logistics professionals and maintenance workers, the industry provides jobs across various skill levels. Additionally, transportation-related activities, such as warehousing and customs clearance, contribute to the overall employment landscape.

Access to Markets and Services: Efficient transportation systems improve access to markets and services. They enable individuals to commute to work, access education and healthcare facilities, and participate in social and recreational activities. In rural areas, transportation is essential for farmers to bring their produce to markets, connecting agricultural regions with urban centres.

Urbanization and Connectivity: Transportation is a linchpin of urbanization, allowing cities to expand and connect with suburban and rural areas. Public transportation systems, including buses and metro services, reduce traffic congestion and enhance mobility within cities. Connectivity is crucial for urban development, fostering economic hubs and cultural exchanges.

Innovation and Technological Advancements: The transportation sector is at the forefront of innovation and technological advancements. From electric vehicles to autonomous drones, ongoing developments aim to make transportation safer, more efficient, and environmentally sustainable. These innovations have far-reaching implications for energy consumption, emissions reduction, and overall sustainability.

National Security and Defence: Transportation is integral to national security and defense. Military movements, logistics, and the deployment of troops all rely on efficient transportation systems. Strategic infrastructure, including roads, railways, and airfields, plays a crucial role in ensuring the swift mobilization of resources during emergencies or conflicts.

Cultural Exchange and Tourism: Transportation facilitates cultural exchange and tourism by connecting people from different regions and cultures. Airlines and cruise ships, for instance, make it possible for individuals to explore diverse landscapes and experience various cultures. Tourism, in turn, becomes a significant contributor to the economies of many countries.

Environmental Impact and Sustainability: The environmental impact of transportation, especially in terms of carbon emissions, has spurred a growing emphasis on sustainability. The development and adoption of eco-friendly transportation alternatives, such as electric vehicles and public transit systems, are crucial for mitigating environmental concerns and addressing climate change.

In conclusion, transportation is the lifeblood of modern societies and economies. Its impact is far-reaching,

influencing economic growth, global trade, employment, urbanization, technological innovation, national security, cultural exchange, and environmental sustainability. Recognizing the importance of transportation is essential for policymakers, businesses, and individuals as they work collaboratively to build and maintain efficient, inclusive, and sustainable transportation systems for the future.

Objectives

- To study the socio-economic profile of the respondents
- To analyse the pre-COVID-19 and post COVID-19 transportation business
- To analyse the transport business prospects during the natural calmative are unexpected COVID19 pandemic situations to sustain the transport business

Materials and Methods

For the purpose of the study, 100 responses were collected from the respondents using Google forms. The respondents were the residents of all over Karnataka. The method of forms used to consider the drawback of time and convenience. The collection of data for the purpose of the study was done in the month of May. The questions included only close ended.

Process of data collection & findings and discussion

1. Pie chart showing the gender description of the respondents

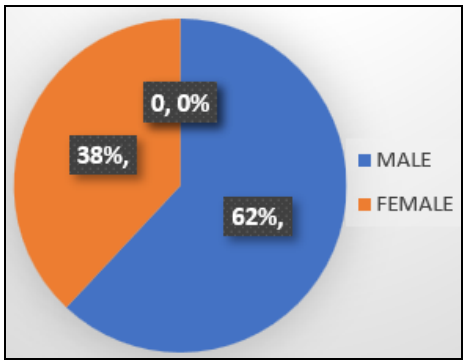

Fig 1: Gender of the respondents

The pie chart represents by the gender of the respondents there 62% males and 38% females in the sample size of the study.

2. Pie chart define by the age group of respondents.

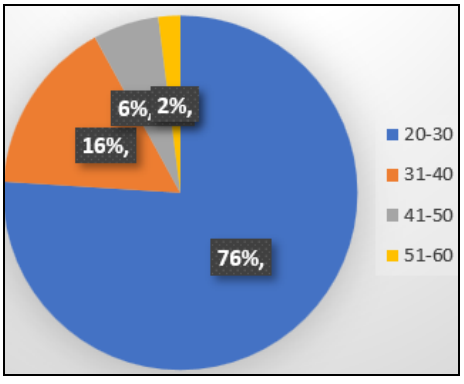

Fig 2: Age group of the respondents

The pie chart showing the age group of the respondents there were 76% respondents are 20-30 age and there were 16% respondents with the age group of 31-40 and the above 41-50 age group of respondents only 6%. Hence majority of respondents were working class and students are there in the survey between 20-40 years forming a huge part of the sample size in the research.

3. Pie chart represented by qualification of respondents

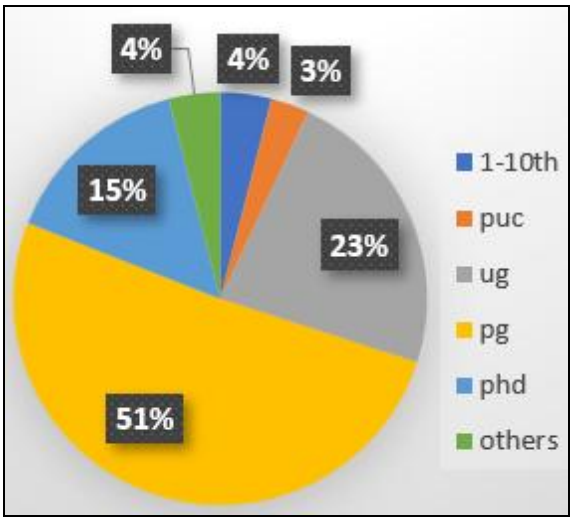

Fig 3: Education

The pie chart showing qualification of respondents there are 51% post-graduation and 23% under graduation and 15% doctor of philosophy and 4% are below Sslc and 4% Puc and 3% others. Hence majority of respondents are from above graduation.

4. Pie chart defined by respondents of workers from various fields

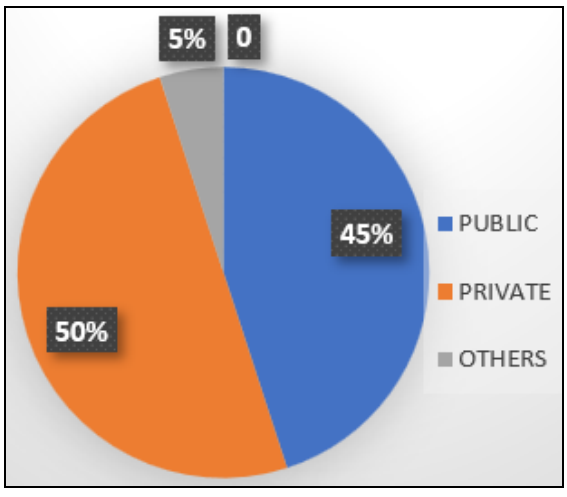

Fig 4: Sector

Pie chart represented by respondents' position in the society there are 50% public sector and 45% private sector and 5% of respondents are other fields. Hence the majority of respondents working are from public and private sectors. There are majority of respondent comes to working place using public transport.

5. Pie chart shows respondents place of living

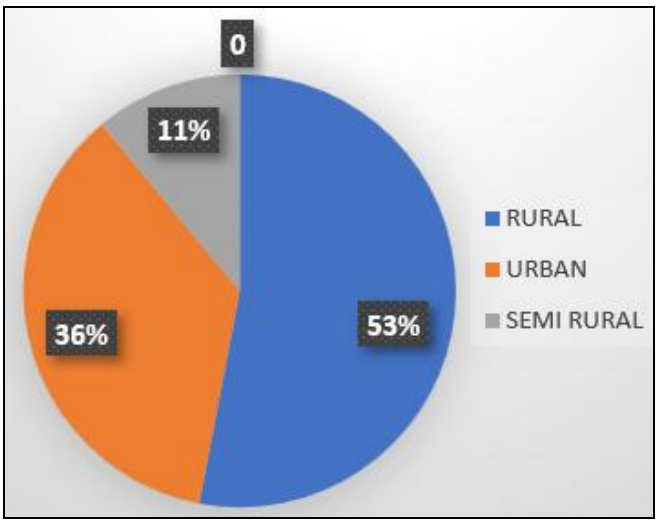

Fig 5: Place of Residence

Pie chart shows that the 53% respondents are from rural and 36% are from urban and 11% are from semi-rural. Hence the majority of respondents comes from rural. They are daily using public transportation to travel from rural to urban.

6. Bar chart represented by respondents of annual income

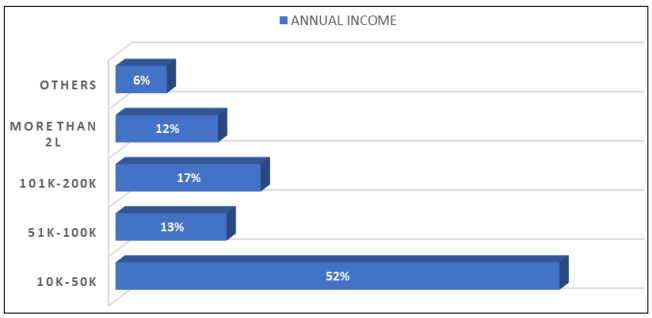

Fig 6: Annual Income of Respondents

Bar chart is represented by the annual income of respondents. Majority of respondents are having the annual income of 10k-50k.

7. Bar chart Showing the how to face transportation system during the COVID

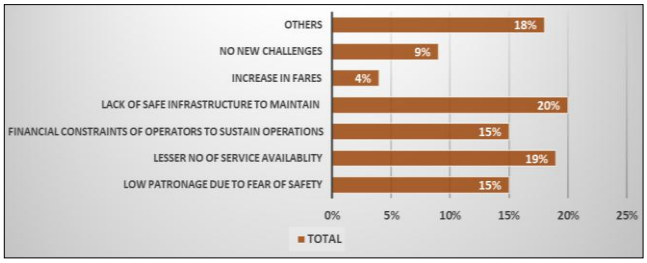

Fig 7: How to face transpiration system during the COVID 19 Period

Remember that reducing the effects of COVID-19 on transport networks requires community awareness, collaboration, and commitment to safety measures. To safeguard your safety and the safety of others, stay informed of local rules and laws and adapts your transportation preferences and behaviour as necessary.

8. Column chart define by opinion about private transport system in the pre and post COVID period.

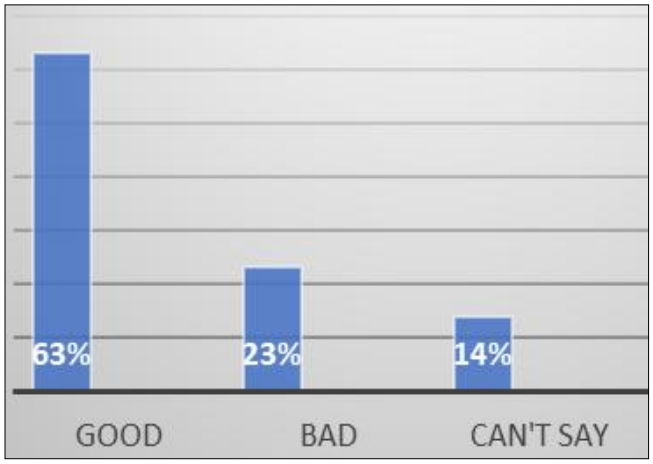

Fig 8: What is your opinion about private transportation system in the pre & post COVID period

The data suggests that while a majority of respondents had a positive view of private transportation systems, there is a notable proportion with negative or uncertain opinions. Public sentiment can be influenced by various factors such as personal experiences, changes in transportation patterns due to COVID-19, environmental concerns, and government policies, among others. Public opinion on this topic may continue to evolve as circumstances change.

9. Column chart represented by opinion good about private transportation

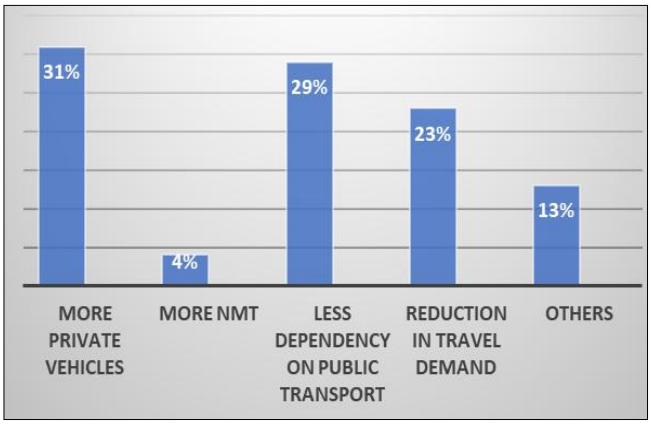

Fig 9: If Good Please Specify How

The impact of private transportation in the pre- and post-COVID periods can be a mix of both positive and negative outcomes. Balancing the benefits of private transportation with measures to address its negative effects, such as improving infrastructure and promoting sustainable forms of private transportation, is essential for a well-rounded transportation system that caters to diverse needs and challenges.

10. Column chart define by future transport sector in India what kind of infrastructure invest

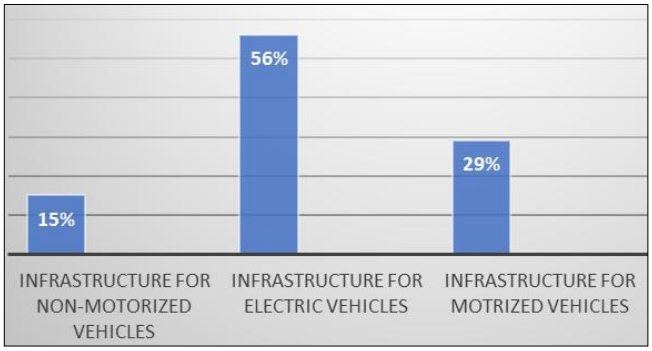

Fig 10: In future the transport sector in India should prioritise investment on what kind of infrastructure

By focusing the majority of the investment on electric vehicle infrastructure, India can accelerate its transition towards a greener and more sustainable transportation system, reducing pollution and dependence on fossil fuels. Additionally, supporting non-motorized transportation will promote a healthier lifestyle and reduce traffic congestion. Balancing investments in all types of infrastructure is essential for creating a comprehensive and efficient transportation system for the future.

11.Bar chart showing the implementation of UMTA

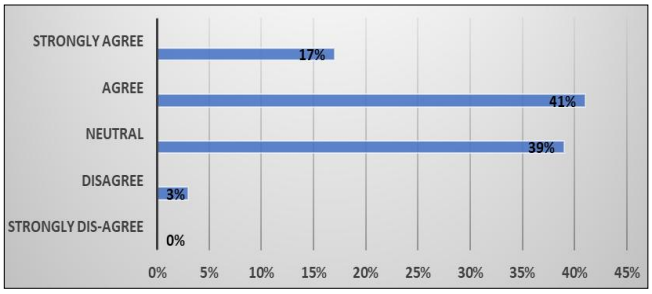

Fig 11: Do you think pandemic can result in speedy implementation of united metropolitan transport authority and can help to coordinate transport sector activities in the city efficiently

In reality, the implementation of a United Metropolitan Transport Authority is typically a complex process involving political, economic, and logistical factors that may or may not be influenced by a pandemic. A crisis like a pandemic can, however, underscore the significance of efficient transportation systems and may lead to revaluations and reforms in the sector. It's important to note that responses to this question may vary based on individual perspectives and specific circumstances.

12. Bar chart showing the how long take for the transport sector to be normal

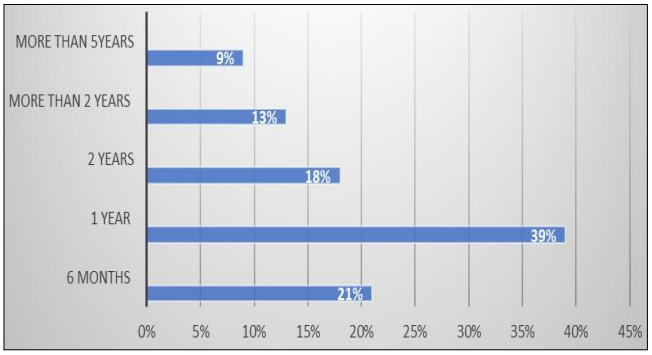

Fig 12: How long do you think it would take for the transport sector to be normal

Pandemic and Health Factors: The COVID-19 pandemic has had a significant impact on the transport sector. The speed of recovery will depend on the control of the virus, vaccination rates, and the emergence of new variants.

Economic Conditions: The overall economic health of a region or country will impact the transport sector. A strong economy can lead to a faster recovery, while a weak economy may delay it.

Government Policies: Government regulations and policies can affect the transport sector. Changes in rules related to travel, safety, and environmental standards can impact the timeline for recovery.

Consumer and Business Behaviour: The willingness of consumers and businesses to travel and invest in transport-related activities plays a crucial role. Changing trends in remote work, e-commerce, and travel preferences can affect recovery.

Technological Advancements: The adoption of new technologies, such as electric vehicles and autonomous transportation, can also influence the rate of recovery in the transport sector.

Environmental and Sustainability Factors: Efforts to make the transport sector more sustainable can affect the timeline for recovery. Transitioning to cleaner energy sources and reducing carbon emissions may take time.

Global Events: Unexpected events, such as natural disasters or geopolitical conflicts, can disrupt the transport sector and impact recovery.

13. Bar chart define by how people using the public transport after COVID

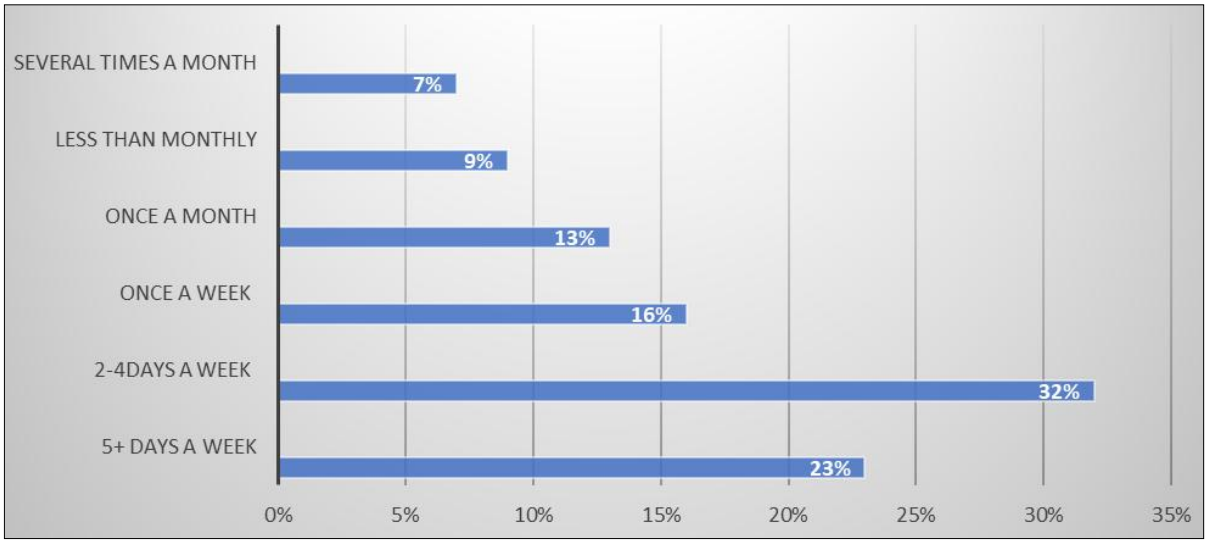

Fig 13: How frequently do you use public transport after COVID

The frequency of using public transport after COVID-19 will depend on a complex interplay of these factors, and it may vary from person to person. Some individuals and communities may return to pre-pandemic usage patterns, while others may continue to adapt their transportation habits based on their evolving needs and preferences.

14. Bar chart represented by do you think about public transportation in the country after COVID

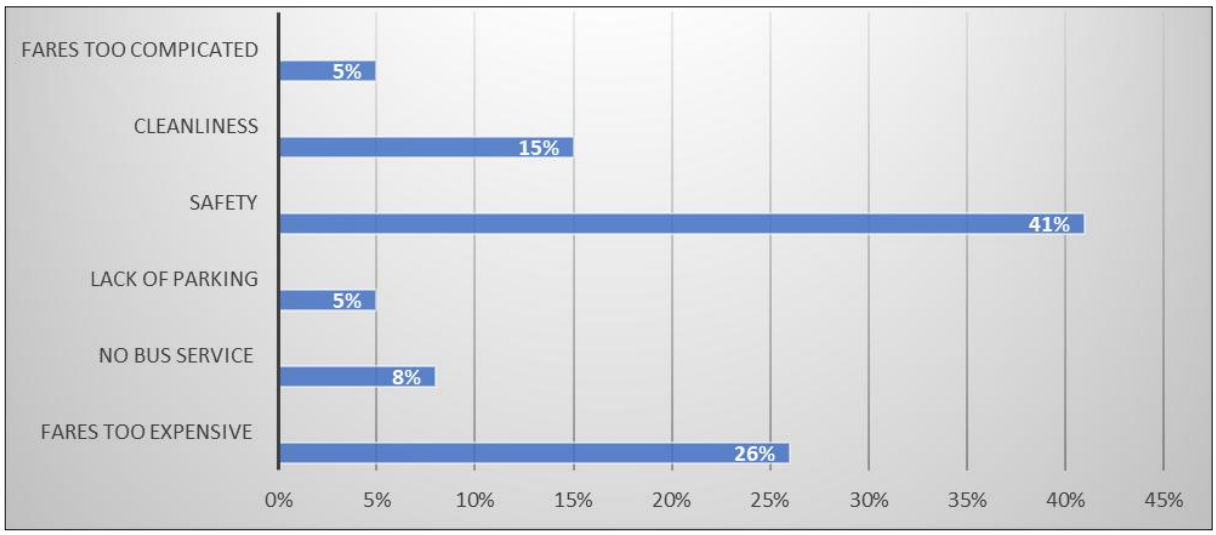

Fig 14: What do you think about public transportation in the country after COVID

Addressing these concerns may require collaboration between government agencies, transportation authorities, and the public. It's important to note that public transportation issues can vary from one location to another. Local governments and transit authorities need to consider the specific needs and challenges of their communities when planning improvements to public transportation systems. Public input and engagement are often vital in shaping policies and solutions that address these concerns effectively.

Conclusion

In conclusion, this comprehensive study delves into the profound impact of the COVID-19 pandemic on the transportation business in India. The data collected and analysed paint a vivid picture of the economic challenges faced by the industry, stemming from travel restrictions and a decline in passenger mobility. The repercussions were far-reaching, affecting transportation revenues, leading to wage reductions, layoffs, and, in some instances, bankruptcy. The collaborative efforts between the government and private transport companies in response to the pandemic are highlighted. From facilitating COVID-19 tests to allocating quarantine centres and aiding in the repatriation of citizens, these measures aimed to mitigate the spread of the virus. The study underscores the challenges faced by governments and transport companies in adapting to new norms, ensuring passenger safety, and preventing the spread of the virus. A critical aspect brought to light is the industry's shift towards technological solutions. Digital ticketing and contactless

payments emerged as crucial elements in making transportation safer. Government support played a pivotal role, providing financial assistance and adjusting policies to alleviate the industry's struggles. The historical narrative of the transportation business in India provides context, emphasizing its evolution from traditional modes to the present-day integration of advanced technologies. The future trajectory is expected to be shaped by continued technological innovations, infrastructure investments, and a growing emphasis on sustainability. The importance of transportation, as highlighted in the study, extends beyond economic considerations. It plays a pivotal role in economic growth, global trade, employment generation, urbanization, and cultural exchange. The pandemic-induced shift in people's behaviour towards personal vehicles raises questions about the future of shared transport services. The study's objectives, methodology, and results offer valuable insights into the socio-economic profile of respondents and the nuanced analysis of pre and post-COVID-19 transportation scenarios. The challenges faced by the industry during unexpected pandemics are emphasized, underscoring the need for sustained adaptability.

Graphical representations, including pie charts, bar charts, and column charts, visually depict respondent demographics, opinions on private and public transportation, and the anticipated recovery period for the transport sector. These visual aids enhance the understanding of the data and facilitate interpretation. In essence, the study provides a comprehensive overview of the intricate relationship between the COVID-19 pandemic and the transportation business in India. It serves as a valuable resource for policymakers, businesses, and individuals grappling with the aftermath of the pandemic, emphasizing the importance of collaborative efforts, technological integration, and sustainable practices for the future resilience of the transportation sector.

References

1. Arena M, Aprea C. Impact of COVID-19 pandemic on air transport: Overview and implications. Advances in Environmental and Engineering Research. 2021;2(1):1–14.
2. Arellana J, Márquez L, Cantillo V. COVID-19 outbreak in Colombia: An analysis of its impacts on transport systems. Journal of Advanced Transportation. 2020;2020:1–16.
3. Barbieri DM, Lou B, Passavanti M, Hui C, Hoff I, Lessa DA, *et al*. Impact of COVID-19 pandemic on mobility in ten countries and associated perceived risk for all transport modes. PLOS ONE. 2021;16(2):e0245886.
4. Asian Transport Union (ATU). Impact of the COVID-19 on the Transport Industry. Research Paper. 2020.
5. Deveci M, Çiftçi ME, Akyurt İZ, Gonzalez EDS. Impact of COVID-19 pandemic on the Turkish civil aviation industry. Sustainable Operations and Computers. 2022;3:93–102.
6. Isa CMM, Nusa FNM, Ishak SZ, Fam SF. Impacts of COVID-19 pandemic on the road and transport sectors using relative importance index. In: 2021 IEEE International Conference on Automatic Control and Intelligent Systems (I2CACIS). IEEE; c2021. p. 305-310.
7. Munawar HS, Khan SI, Qadir Z, Kouzani AZ, Mahmud MP. Insight into the impact of COVID-19 on Australian transportation sector: An economic and community-based perspective. Sustainability. 2021;13(3):1276.
8. Meng F, Gong W, Liang J, Li X, Zeng Y, Yang L. Impact of different control policies for COVID-19 outbreak on the air transportation industry: A comparison between China, the US and Singapore. PLOS ONE. 2021;16(3):e0248361.
9. Nundy S, Ghosh A, Mesloub A, Albaqawy GA, Alnaim MM. Impact of COVID-19 pandemic on socio-economic, energy-environment and transport sector globally and sustainable development goal (SDG). Journal of Cleaner Production. 2021;312:127705.
10. Perkumienė D, Osamede A, Andriukaitienė R, Beriozovas O. The impact of COVID-19 on the transportation and logistics industry. Problems and Perspectives in Management. 2021;19(4):458–469.
11. Periokaitė P, Dobrovolskienė N. The impact of COVID-19 on the financial performance: A case study of the Lithuanian transport sector. Insights into Regional Development. 2021;3(4):34–50.
12. Rothengatter W, Zhang J, Hayashi Y, Nosach A, Wang K, Oum TH. Pandemic waves and the time after COVID-19 – Consequences for the transport sector. Transport Policy. 2021;110:225–237.
13. Shortall R, Mouter N, Van Wee B. COVID-19 passenger transport measures and their impacts. Transport Reviews. 2022;42(4):441–466.
14. Sogbe E. The evolving impact of coronavirus (COVID-19) pandemic on public transportation in Ghana. Case Studies on Transport Policy. 2021;9(4):1607–1614.
15. Subramanya K, Kermanshachi S. Impact of COVID-19 on transportation industry: Comparative analysis of road, air, and rail transportation modes. In: International Conference on Transportation and Development 2021. ASCE; c2021. p. 230–42.
16. Tien NH. The impact of COVID-19 pandemic on brand value of transport and logistics industry in Vietnam. International Journal of All Multidisciplinary Research Studies. 2022;1(2).
17. Tardivo A, Carrillo Zanuy A, Sánchez Martín C. COVID-19 impact on transport: A paper from the railways' systems research perspective. Transportation Research Record. 2021;2675(5):367-378.
18. Vo TD, Tran MD. The impact of COVID-19 pandemic on the global trade. International Journal of Social Science and Economics Invention. 2021;7(1):1-7.
19. Xiang S, Rasool S, Hang Y, Javid K, Javed T, Artene AE. The effect of COVID-19 pandemic on service sector sustainability and growth. Frontiers in Psychology. 2021;12:1178.