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Ensuring safe and sustainable mobility in India

Role of emerging technologies

pwc

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Foreword by ASSOCHAM

The Indian economy is estimated to touch 7% growth in 2024 and sustain a steady growth over next two decades.[1] The road infrastructure plays a pivotal role in this economic growth, with over 60% of the cargo transportation supported by road transport.[2] One of the major challenges on the road infrastructure is the safety.

Every year in India, about 1,50,000 people are killed and 5,00,000 are injured due to road traffic crashes.[3] Of these, the working age group of 18-60 years account for about 85% of road accidental deaths. As per the WHO Global Report on Road Safety 2018, India accounts for almost 11% of the crash related deaths in the world.[4] The scale of efforts needed to address the 4,50,000+ road traffic crashes outstretch the available resources. In an era marked by unprecedented technological advancements and an increasing emphasis on road safety, the transportation sector stands at a critical juncture.

This knowledge paper delves into the multifaceted dimensions of safe mobility, examining the innovations that are driving this transformation, potential impact on society, and evolving market dynamics. From electronic enforcement and autonomous driving systems to smart infrastructure and advanced materials, many emerging technologies have been covered in this paper. Each chapter provides an insightful analysis and thought-provoking perspectives on how these technologies can contribute to a safer and more sustainable future.

I am happy to note that ASSOCHAM in association with PwC is presenting a knowledge paper on 'Ensuring safe and sustainable mobility: Role of emerging technologies'. We hope that the insights shared in this paper will inspire the use of innovative solutions to improve safety and catalyse meaningful action towards a more sustainable future for all.

Deepak Sood
Secretary General
ASSOCHAM

1 https://www.business-standard.com/economy/news/imf-raises-india-s-gdp-growth-forecast-by-20-basis-points-to-7-for-fy25-124071600970_1.html
2 https://morth.nic.in/road-transport
3 Road Accidents in India 2022, Transport Research Wing, Ministry of Road Transport and Highways
4 Global status report on road safety 2018, WHO

Foreword by PwC

To begin, I would like to offer my best wishes for the 8th Road Safety Conference being organised by ASSOCHAM with the theme 'Future for safe ecosystem through innovative and sustainable solutions'. India leads the world in emerging technologies in wide-ranging sectors like infrastructure, automotive and FinTech. Unfortunately, India also holds the top numbers in terms of road traffic crashes and fatalities. The theme of the conference is well-positioned to draw attention to these contrasting shades of the country.

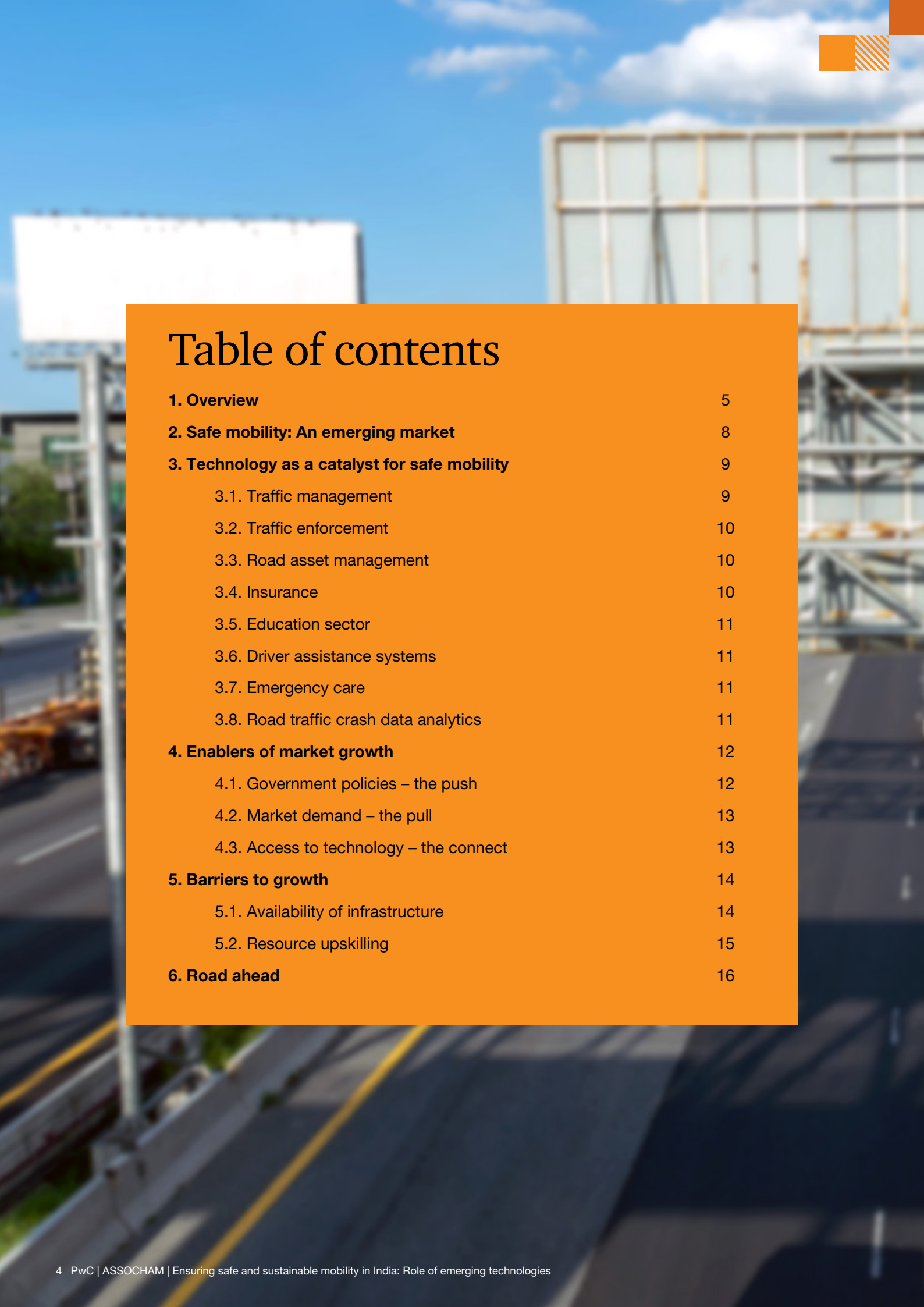
The WHO estimates a whopping 1.35 million road traffic deaths every year. In 2022, about 1,68,000 people were reportedly killed in over 4,60,000 road traffic crashes in India alone – this is about 11% of the global burden of road traffic deaths.[5] The sheer scale and diversity of the inherent risks on the roads of India outstretches the available resources towards mitigation efforts. This makes a compelling case for looking beyond the conventional means in order to develop sustainably scalable solutions. In this context, the industry can leverage technological advancements to pave the way for the safe mobility market, which will offer lucrative opportunities while improving road safety. The use cases and the potential of such emerging technologies are diverse in the safe mobility market.

The Government of India has introduced various initiatives based on the 'Es' of road safety – i.e. engineering, enforcement, education and emergency services – to reduce traffic fatalities on Indian roads. Some marquee technology-driven initiatives include the implementation of the Motor Vehicles Act section 136A on electronic enforcements, establishing India-specific crash testing through Bharat New Car Assessment Program (BNCAP) that focuses on both active and passive safety, and setting up a nation-wide crash database. The market has also responded equally well and embraced safe mobility with these technological advancements, as evidenced by the recent uptick in the sales of 'safer' vehicles.

These developments and market reaction have potentially established safe mobility as an industry in itself, stretching across other areas like data centres, communications technology, resource upskilling, big data analytics, transport planning, mobility financing and emergency response. This knowledge paper aims to highlight the emergence of technology-driven safe mobility as an independent industry, along with its current state, estimated growth and potential for transforming road safety in India. I am confident that the insights shared in this knowledge paper will contribute to the initial impetus to begin conversations around technological advancements in order to improve mobility in India.

Devayan Dey
Partner – Roads and Mobility
PwC India

5. Global status report on road safety 2018, WHO



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01 Overview

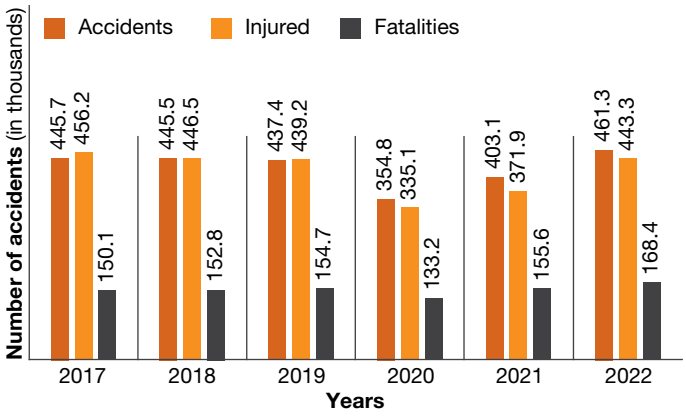
With India on its way to become the fourth-largest economy in the world,[6] the importance of road transport in this endeavour cannot be understated. The road network in India is robust and features among the top three longest road networks in the world. Moreover, the transport sector carries over 60% of the total cargo, backing up the trade and commerce industry in the country.[7] With India standing at the brink of rapid infrastructural development, risks to commuters' safety continue to grow significantly. Therefore, in order to ensure the sustainable infrastructural growth, it is necessary to make dedicated investments to ensure their safety – i.e. safety should be a 'must-have' and not an afterthought.

An overview of road accidents in India and across the world

1.3 Mn
Fatalities happen every year due to road accidents globally

3% GDP
of most countries is lost due to road accident

Age 5-29
Road accident a major cause of death in the age group



Top 10
causes of death of low-middle income countries

11% of world's road accident fatalities happen in India despite India having mere a **mere 1% share of global vehicles,** as per a World Bank report.

Concern
Despite well-funded efforts, deaths due to crashes have increased in the recent past.

With increasing growth in motorisation and road network, there is an urgent need to address increasing traffic fatalities.

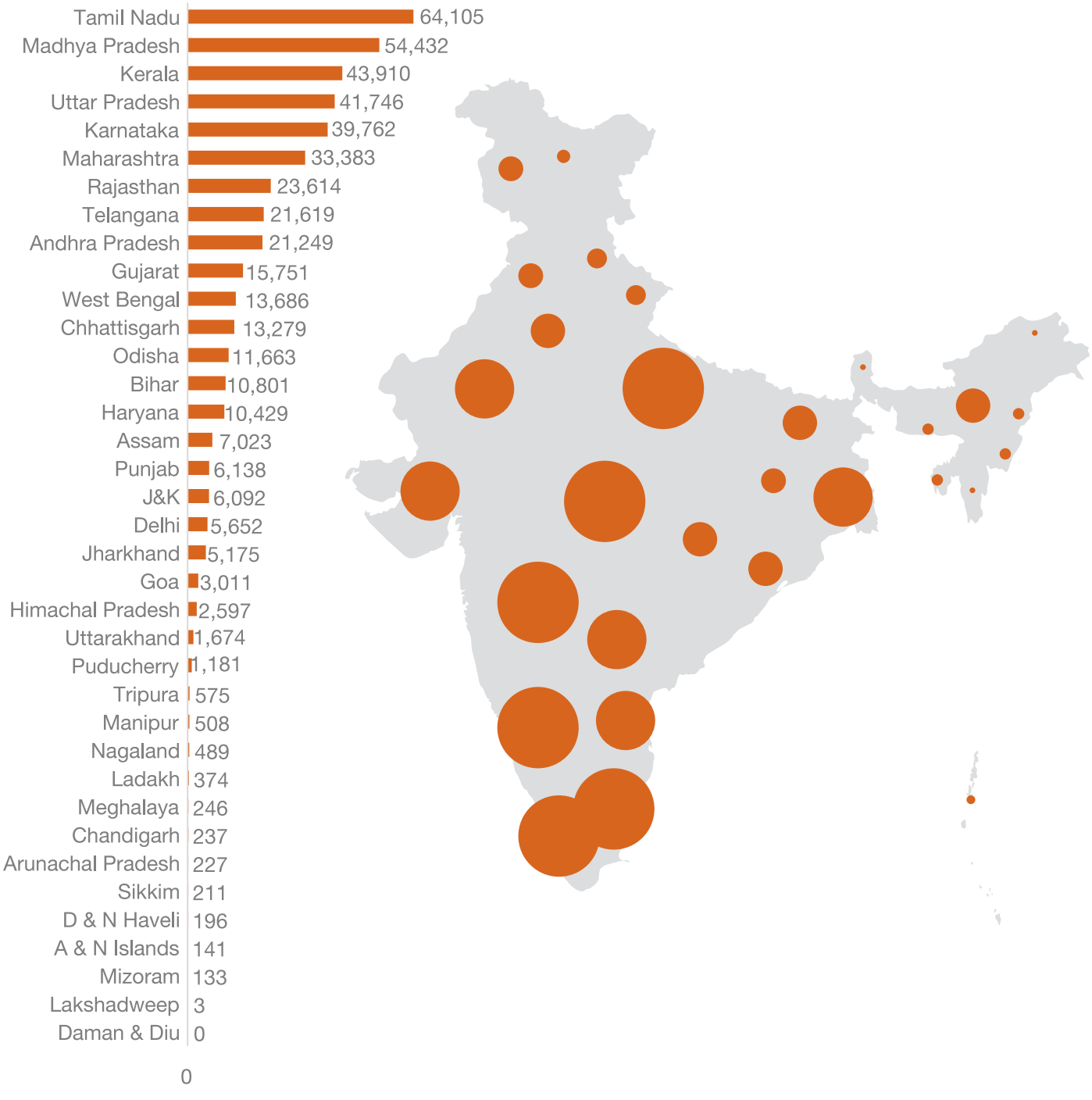
Sources: World Health Organization; Road Accidents in India – 2022, Ministry of Road Transport and Highways

Due to India's diverse geography, the scale of road traffic crashes also varies across the nation. Larger states like Uttar Pradesh, Madhya Pradesh, Maharashtra, Tamil Nadu and Karnataka continue to report the highest number of road traffic crashes and fatalities. Therefore, improving safe mobility in the country is imperative, irrespective of the diverse landscape.

6 https://www.forbesindia.com/article/explainers/top-10-largest-economies-in-the-world/86159/1
7 https://morth.nic.in/road-transport

Insights from road accidents in India 2022

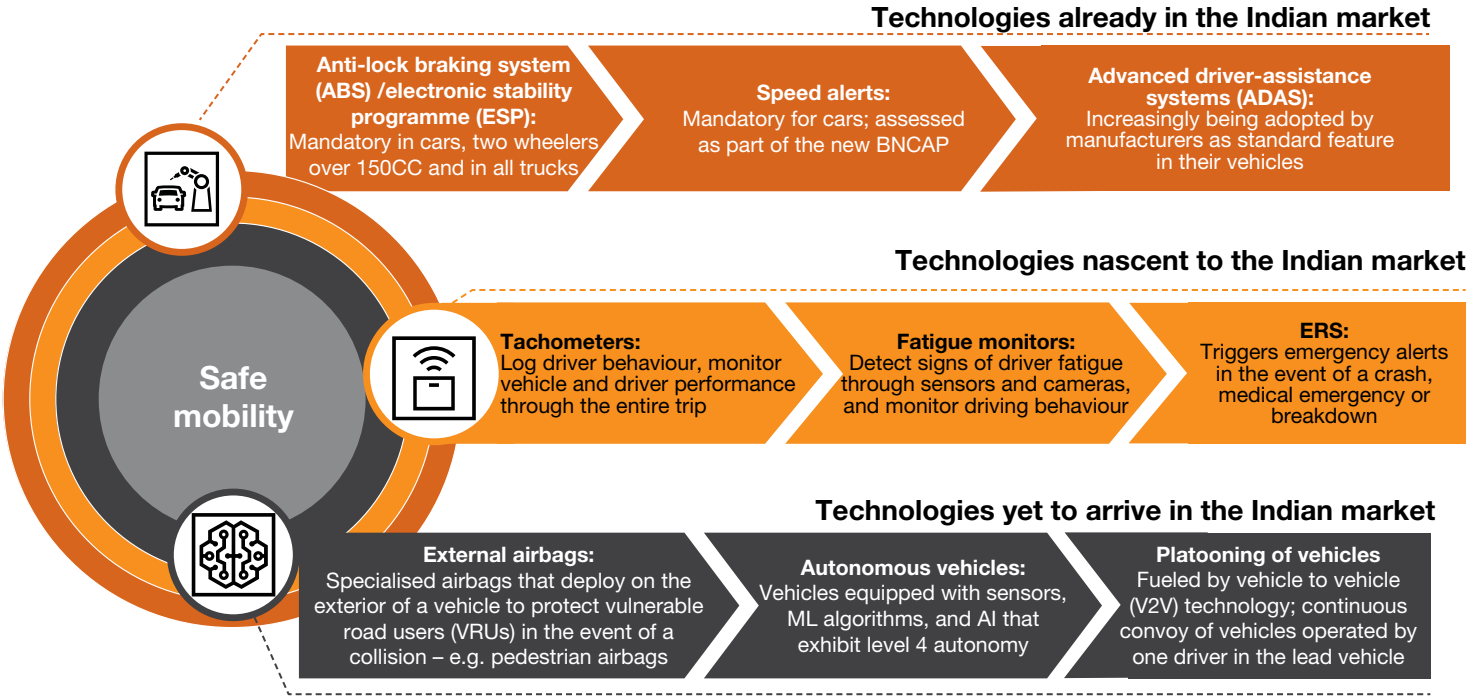
Road accidents in India in 2022



Source: Road Accidents in India 2022 Report, Ministry of Road Transport & Highways

02 Safe mobility: An emerging market

Safe mobility has seen increased focus in recent times in India. This can be attributed to the widely publicised vehicle star ratings of cars manufactured in India. The automotive industry has therefore responded by improving the safety quotient of their products, like voluntarily offering driver and passenger airbags as standard feature in all of their product variants. Moreover, the Government has developed an India-specific crash testing protocol, mandating manufacturers to comply with local crash test norms. This push is supplemented well by the market's pull for safer vehicles.



Automobiles in India are becoming increasingly sophisticated. However, vehicles form only one part of the problem. Due to the sheer pace of such developments in the auto sector market, customers and the general road infrastructure have not had adequate time to catch up and become attuned to these changes.

Since vehicles, road users and road infrastructure are all integral to safe mobility, it is imperative to factor in all components that may be contributing to crashes, in order to holistically improve mobility in the country.

03 Technology as a catalyst for safe mobility

3.1. Traffic management

A quick analysis of colliding vehicles in road traffic crashes[8] provides a deep dive into their individual vulnerabilities in terms of causing and being affected in a crash. The crash data from 2022 portrays the following picture:

32,825 (20%) pedestrians lost their lives.

Impacting road user group share:
Two wheelers: **28%**
Cars, taxis, vans and light motor vehicles (LMVs): **24%**

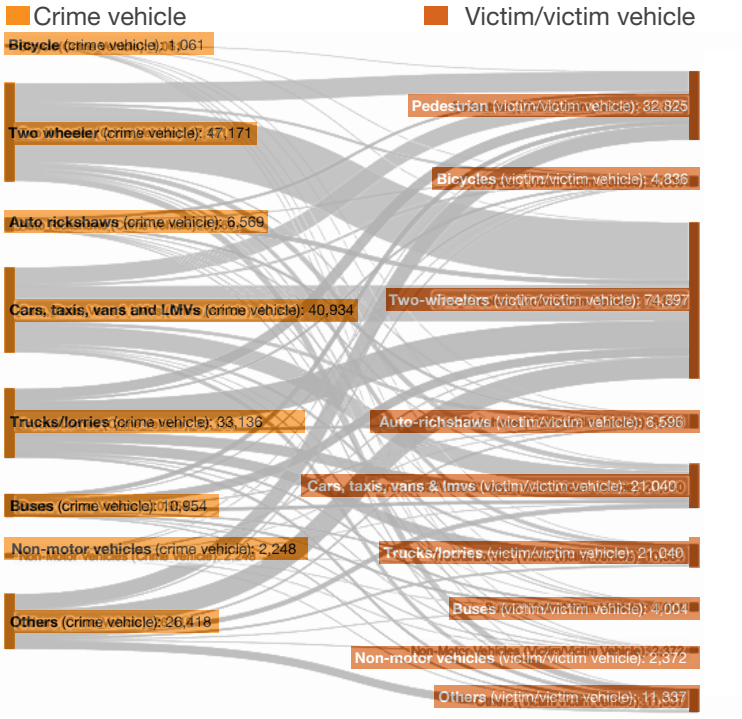
74,897 (45%) deaths were two-wheeler riders.

Impacting road user group share:
Two wheelers: **37%**
Cars, taxis, vans and LMVs: **23%**
Trucks and lorries: **18%**

21,040 (~12%) occupants of cars, taxis, vans, and LMVs lost their lives.

Impacting road user group share:
Cars, taxis, vans and LMVs: **42%**
Trucks/lorries: **24%**

Crime vehicle vs. victim / victim vehicle (India 2022)



From these datapoints, we can infer that although trucks are most involved in road accidents, they are among the least affected. Comparatively, two wheelers are the most involved and most affected category across India. These insights can be used to categorise users into crash prevention and injury mitigation groups – i.e. two wheelers, trucks and cars can be the focus groups for crash prevention strategies, while pedestrians and two wheelers can fall under the focus groups for injury mitigation measures. This incompatibility between the road users can be addressed by segregating them spatially or temporally.

8 Road Accidents in India – 2022, Transport Research Wing, MoRTH

By leveraging emerging technologies, we can attempt to streamline traffic flow, reduce congestion and help reduce crash risk. Various technologies can be clubbed together to form an intelligent traffic management system (ITMS) which leverages data analytics, communication systems and automation. A comprehensive and robust ITMS typically comprises AI-powered cameras with vision-based analytics, weather-proof speed sensors and a strong communications channel to support high-speed data transfer. Such systems improve efficiency and safety of transportation networks.

3.2. Traffic enforcement

Traffic enforcement has a direct impact on safe mobility. Although traffic crashes and resulting fatalities are measured to the maximum possible extent, the quantum of traffic violations is far beyond what human resources can possibly monitor and act upon. One of the primary challenges in this regard is ensuring the presence of an enforcement officer at all times. This approach is impractical and increases the occupational risk for enforcement officers. Technology-enabled traffic enforcement thus has a direct impact on improving the monitoring and recording of traffic violation. This goes hand in hand with the manual enforcement, thereby providing a robust network of round-the-clock monitoring. Technology-enabled enforcement systems are essentially an extension of ITMS capabilities and can be categorised under soft and hard enforcement mechanisms.

Soft enforcements
The system generates a visual warning to the passerby if the speed is calculated to be over the slated speed limit for the location. No legal action is pursued.

Hard enforcements
A combination of multiple systems to measure, record, verify records and issue a legal enforcement ticket to the violator.

Recognising the potential of such technologies, the Ministry of Road Transport and Highways (MoRTH) through provisions under the Motor Vehicle Amendment Act, is driving on-ground implementation of electronic monitoring and enforcements. At the personnel level, on-body cameras and vehicle-mounted speed guns arebeing implemented, and at the infrastructure level, AI cameras are being used to carry out traffic enforcements.

3.3. Road asset management

Emerging technologies – from blockchains to remote sensing, drones, and robotics – are revolutionising the way road assets are managed by road authorities. By leveraging these, road assets can evolve to be more proactive, data-driven and efficient, and result in reduced maintenance costs and improved safety for road users.

- Road concessionaires have increasingly been using drones to monitor their assets remotely, minimising the exposure of their workforce to traffic risks.
- Some state governments and private entities in India have shown interest in adopting blockchain for various public projects, including road construction. For instance, the Andhra Pradesh government has been exploring the use of blockchain for land records management, which could extend to other types of contracts.

This underscores the willingness of the industry to adapt to changing trends. However, the implementation of these at scale is limited by the lack of adequate guidelines, technical specifications and the required infrastructure, considering the nascent stages of these technologies in India.

3.4. Insurance

India is a price-sensitive market for any industry. Capitalising on this by incentivising good and safe driving has the potential to yield a sustainable behavioural change. All vehicles come with a considerable number of electronic parts which constantly monitor the health of components and driver inputs. Extending the use of these telematics for real-time analysis can help develop a Driver Safety Score – which can be something similar to the CIBIL score that presents an individual's credit profile. Besides encouraging safe driving, this could potentially improve the longevity of the vehicle.

Such use cases have seen some degree of implementation in some countries and are under consideration in others. The primary challenge to such a paradigm shift in insurance costing stems from the lack of and

appreciation of its potential in improving safety, by the consumers, high initial costs, concerns around data privacy and, most importantly, availability of the required infrastructure.

3.5. Education sector

Augmented reality (AR) and virtual reality (VR) have made an indelible mark on the education sector. Using advanced virtual learning platforms, educational institutions simulate real-time traffic safety risks in classrooms. This fosters experiential learning within the classroom and helps create a generational shift by imbibing safety principles from a young age.

Outside of an institutional setup, 'safety education' extends beyond schools and colleges. By using high-fidelity simulators and VR environments driving schools and training centres can help road users navigate mobility risks in a safe environment. While the capital investment of such systems may be high, the benefits accrued for society at large over the lifecycle of the system can be significant.

3.6. Driver assistance systems

Automated driver assistance systems (ADAS; vehicle-based technologies like collision or lane departure warning) perform the dual function of warning the driver of potential hazards and intervening at crucial moments to prevent crashes. ADAS has been reported to have had a positive influence on improving defensive driving behaviour. ADAS works with soft nudges and intervenes when required, akin to a driving instructor, and this helps inculcate defensive driving skills within the driver.

Currently, the scalability of the ADAS may be limited to four wheelers but research is already underway to improve the inherent instability of two wheelers. This can be seen from the already showcased models of self-balancing two wheelers, trike models in the market, and intensive research on enclosed commuter pods that could replace today's two wheelers with much safer and ADAS-fitted alternatives. Two wheelers form more than 80% of the total vehicles in India, highlighting the market scale for emerging technologies in this segment.

3.7. Emergency care

The successful treatment and outcome from a road traffic trauma often depends on being able to provide timely treatment to the victim(s). Delays in the emergency response supply chain can be three-fold and may be avoided by leveraging the latest technologies and empowering emergency centres by factoring in components like road infrastructure, vehicle architecture and communication channels with the nearest medical facility in the emergency response systems integrated in vehicles.

Challenges leading to delays

- Availability and accessibility of EMS to crash spot quickly
- Stabilising the victim and reaching medical facility at the earliest
- Diagnosis and commencement of the right treatment

Technology to the rescue

- RFID-based traffic signal trigger mechanism to create 'green corridor'
- Video conferencing with doctors to fast-track diagnosis even before reaching a medical facility
- Use of AI to create crash profiles to improve triage capabilities

Systemic mapping of resources and vulnerable crash spots, introducing vision-based communication technologies within ambulances, and use of AI models to develop crash profiles, and improving preparedness are currently being trialled at various levels across the nation. However, these measures are still in their nascent stages and can benefit from more research and funding traction in order to mainstream them in the future.

3.8. Road traffic crash data analytics

Advanced analytical tools such as predictive analytics, big data analytics and AI bring immense potential to data-driven implementations using available crash and traffic data. With national level crash data systems being deployed, combining various other data sets like insurance, vehicle maintenance and repairs can offer deeper insights into traffic analytics systems and help enhance road safety.

04 Enablers of market growth

The following key factors are observed to be critical in shaping the evolution of the safe mobility industry.

4.1. Government policies – the push

A top-down push driven by Government initiatives is crucial for accelerating adoption and penetration of any new directive. This creates a legal and institutional framework to abide by, clearly defines opportunities in research, and provides a level playing field for all players involved in the industry.

Importance of top-down push	Impact on technology penetration
Setting regulatory standards: Establish and enforce regulations that mandate use of advanced technologies and drive innovation in the industry.	**Improved safety standards:** Ensure participation from all stakeholders and maintain consistency across the spectrum.
Promoting research and development: Articulate problem statements, establish research funds and promote development of technologies aimed at enhancing safe mobility.	**Technological innovation:** Create funding avenues to stimulate research on safe mobility.
Financial incentives and subsidies: Provide financial incentives such as tax breaks, subsidies for adopting safety technologies, or funding for research and development.	**Accelerated adoption rates:** Subsidies offset the impact of high initial costs that are associated with any advancements. These costs could be offset by the spending on rectification measures.
Public awareness and education: Promote safe driving practices and benefits of adopting new safety technologies to raise awareness among consumers and stimulate demand for safer mobility.	**Market demand:** Nothing drives an industry as much as a well-made product supported by a well-informed market.

4.2. Market demand – the pull

Understanding the importance of a bottom-up approach is crucial for crafting effective management and policy instruments, especially in a demand-driven market like India. This approach involves gathering insights from the ground level, including consumer preferences, market trends, and grass-roots realities, to make policy decisions that are both relevant and impactful.

A compelling example of this is the recent uptick in the adoption of safer cars over those merely equipped with advanced technology features. Indian consumers are increasingly prioritising vehicle safety, driven by heightened awareness of road safety issues and the influence of stringent Government regulations such as the BNCAP. **There has been an increase in the adoption of vehicles with essential safety features such as airbags, ABS and electronic stability control in the last three years.**[9]

This bottom-up understanding has enabled policymakers to tailor regulations that not only meet safety standards but also align with consumer demand, creating a healthy cycle of market-driven growth in the safe mobility sector. Such an approach ensures that management and policy instruments are not only theoretically sound but also practically effective, addressing the real needs and behaviours of the market.

4.3. Access to technology – the connect

The current market landscape fosters rapid advancement of emerging technologies across infrastructure, human technology and vehicles. Some of the current areas where technology measures is being integrated are;

- Infrastructure development with smart cities integrating the internet of things (IoT) and AI in optimising transportation networks for the cities.
- Technological advancements like 5G connectivity are revolutionising communication and data processing capabilities, enhancing the efficiency and safety of vehicles.
- Electric and autonomous vehicles are becoming mainstream, supported by investments in battery technology and AI-driven navigation systems.[10]

These technologies are still to reach their full potential and impact the industry. This gap thus needs to be bridged, by facilitating technological interventions and monitoring them closely against the net outcome of reduced road traffic crashes and fatalities. The paradigm shift brought about by emerging technologies highlights the demand, scope and scale of the overall safe mobility ecosystem in the near future.

9 https://auto.economictimes.indiatimes.com/autologue/traction-of-safety-features-amongst-small-passenger-vehicle-customers/1808
10 https://www.psa.gov.in/technology-frontiers/future-transportation/690

05 Barriers to growth

Globally, the biggest barrier to improving safety in mobility has been identified as lack of government support.[11] Other barriers are listed below:

- lack of guidelines and standards to enable consistent, interoperable implementation of technologies for safe mobility
- capacity issues, including availability of skilled workforce and capacity among implementation agencies, which can often prove to be a hurdle for proper implementation
- challenges related to crash data, including collection, storage, knowledge and application of analysis, are widespread and a stumbling block in India as well as many low- and middle-income countries (LMIC) countries
- lack of strategic measures such as setting targets for reduction of crash-related fatalities and measurement of progress are often cited as an issue in countries like India.

In a developing economy like India, the challenges are more granular, ranging from stakeholder coordination to availability of sound crash data. This highlights the need for a strong institutional framework and ownership to drive the agenda of safe mobility, as the subject spans multiple stakeholders.

Funding towards safer mobility is available under various loans and grants. However, a sustainable source of funding to support and nurture this industry is still a major impediment. Smart mobility financing is yet another allied sector for supporting the long-term evolution of safe mobility.

11 Implementation of national safe system policies: A challenge, PIARC, Report 2019R39EN

5.1. Availability of infrastructure

Scalability of IoT-based smart and safe mobility is heavily reliant on high-speed communication. The pace of transition to 5G networks and urban penetration has a high impact on the reach of wider interventions. The implementation and sustainability of emerging smart technologies to address road safety issues in India face significant infrastructure barriers. These are multifaceted and span technological, regulatory, financial and socio-economic dimensions.

- Reliable and high-speed internet connectivity is essential for smart technologies such as connected vehicles and real-time traffic management systems. Many rural and semi-urban areas in India still await adequate internet infrastructure.
- Once connected, there is a need for robust data collection, storage and analysis capabilities. Gaps in standardised data architecture, especially across different agencies, significantly impede this growth.
- Implementing scalable traffic management systems that can handle the high volume of vehicles in densely populated cities is a significant challenge, with most networks still operating on standalone systems.
- A common yet important impediment is the availability of initial capital investments in infrastructure. The operating expenditure is substantial and spread over a long term, which demands sustainable funding models to keep up the installed environment.
- More importantly, public awareness and understanding of the benefits of such emerging technologies are critical for market penetration as most of these work in the back end. Safety-centric marketing campaigns, making safety part of education and hosting wide-ranging discussions around this issue are some of the gaps that need to be addressed. As a result, there is resistance to adopting new technologies among various stakeholders, including drivers, traffic police and local authorities.

5.2. Resource upskilling

Upskilling of human resources in operation, maintenance and interpretation within the context of safe mobility in India is crucial to seamlessly harness and integrate emerging technologies and improve overall transportation safety. Currently, there is a notable skill gap across various avenues.

- **Service professionals:** Advanced technology in the automobile industry requires sufficiently trained mechanics in electronics and telematics. This helps in streamlining operation, maintenance and servicing to ensure optimal functionality, safety and longevity.
- **Analysts and planners:** Drawing intelligence from the available wealth of data requires specialism in predictive analysis to develop mobility and congestion models and crash prediction models, and to prepare proactive maintenance plans.
- **Cybersecurity specialists:** The increasing reliance on digital infrastructure makes cybersecurity vital for countering cyberthreats that could compromise the entire environment.
- **Interpersonal communication:** The agenda under safe mobility cuts across sectors horizontally and vertically. This necessitates focus on both technical skills related to new technologies and soft skills such as communication and teamwork.

06 Road ahead

Safe mobility is a multi-sectoral and multidimensional concern. The scale and impact of traffic crashes are substantial and not limited to social effects as financial implications are estimated to be up to 3% of the national GDP.[12] Road traffic crashes have a far-reaching effect at a personal level as well as a national level. There is international recognition of its urgency, and the Government of India has been taking active steps in this direction.

Technological interventions for road safety in India

Vehicle	Road user	Infrastructure	Health
BNCAP	Education using digital tools	Real-time monitoring of audit and improvement works	Pre-hospital intimation and optimisation of processes
Automated testing station for vehicle fitness regime	Driving training and licensing regime	Smart mobility solutions	Integration of emergency dialling
e-DAR			

The Government's commitment to improving road safety is evident from the various policies and initiatives it has implemented:

- **BNCAP:** MoRTH vide G.S.R. 698(E) dated 27 September 2023 inserted a new rule 126E in Central Motor Vehicles Rules (CMVR), 1989 regarding the BNCAP. This programme aims to create an ecosystem of competitive safety enhancements leading to increased awareness among consumers. Consumers can then take an informed decision by making a comparative assessment on vehicle performance under crash test conditions.
- **Electronic - Detailed Accident Report (e-DAR):** The Government is pursuing a complete revamp of the crash data collection ecosystem and making e-DAR the central repository for reporting, management, claim processing and analysis of road accidents data. Many states have taken up this new system and are at various stages of overhauling the crash data collection process.
- **Inspection and Certification (I&C) Centres:** The MoRTH has also launched a scheme for implementation of model vehicle I&C Centres to ensure efficient and transparent vehicle inspections. The scheme is expected to reduce road accidents and pollution, thus transforming the vehicle fitness regime.
- **Driving Training Centres (DTCs):** The MoRTH has launched a scheme for setting up model institutes of Driving Training and Research (IDTR) Centres, Regional Driving Training Centres (RDTCs) and Driving Training Centres (DTCs) in states and union territories.
- **Road Safety Advocacy Schemes:** These schemes comprise grants and financial assistance and focus on capacity building programmes, pilot projects and awareness campaigns.
- **Good Samaritan Law:** This is a scheme for awarding a good Samaritan who saves the life of an accident by providing immediate assistance and taking the victim to the nearest to hospital/trauma care centre within the golden hour.[13]
- **Integration of emergency contact numbers:** Emergency numbers (e.g. 108 for ambulance services) have been integrated into mobile phones, along with setting up of highway patrol units and trauma care centres along major highways to provide timely medical assistance to accident victims.
- **Smart mobility solutions:** The Government is exploring smart mobility solutions such as intelligent transportation systems (ITS) to improve traffic management, reduce congestion and enhance road safety through real-time monitoring and data-driven interventions.

Most of the above initiatives are still evolving. India's burgeoning economy offers a multitude of opportunities to scale up business endeavours. Despite several barriers, safe mobility is an industry in itself considering the national and international commitments to reduce traffic fatalities. The overall market is expected to grow significantly to cater to the strong push from the Government and a reciprocal pull from consumers. There is thus ample scope for the safe mobility industry as well as for allied areas such as data centres, equipment manufacturing and maintenance support, resource upskilling and financing.

13 MoRTH

About ASSOCHAM

The Associated Chambers of Commerce & Industry of India (ASSOCHAM) is the country's oldest apex chamber. It brings in actionable insights to strengthen the Indian ecosystem, leveraging its network of more than 4,50,000 members, of which MSMEs represent a large segment. With a strong presence in states, and key cities globally, ASSOCHAM also has more than 400 associations, federations and regional chambers in its fold.

Aligned with the vision of creating a New India, ASSOCHAM works as a conduit between the industry and the Government. The Chamber is an agile and forward looking institution, leading various initiatives to enhance the global competitiveness of the Indian industry, while strengthening the domestic ecosystem.

With more than 100 national and regional sector councils, ASSOCHAM is an impactful representative of the Indian industry. These Councils are led by well-known industry leaders, academicians, economists and independent professionals. The Chamber focuses on aligning critical needs and interests of the industry with the growth aspirations of the nation.

ASSOCHAM is driving four strategic priorities - Sustainability, Empowerment, Entrepreneurship and Digitisation. The Chamber believes that affirmative action in these areas would help drive an inclusive and sustainable socio-economic growth for the country.

ASSOCHAM is working hand in hand with the government, regulators and national and international think tanks to contribute to the policy making process and share vital feedback on implementation of decisions of far-reaching consequences. In line with its focus on being future-ready, the Chamber is building a strong network of knowledge architects. Thus, ASSOCHAM is all set to redefine the dynamics of growth and development in the technology-driven 'Knowledge-Based Economy. The Chamber aims to empower stakeholders in the Indian economy by inculcating knowledge that will be the catalyst of growth in the dynamic global environment.

The Chamber also supports civil society through citizenship programmes, to drive inclusive development. ASSOCHAM's member network leads initiatives in various segments such as empowerment, healthcare, education and skilling, hygiene, affirmative action, road safety, livelihood, life skills, sustainability, to name a few.

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About PwC

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