

Viksit Bharat 2047: Vision and roadmap for the Indian tyre industry



September 2025

Foreword

Vision and roadmap for the Indian tyre industry

The Indian tyre industry is a key pillar of India's journey towards Viksit Bharat 2047. Our sector has evolved rapidly by integrating cutting-edge technology, adopting sustainable practices and enhancing its global competitiveness to meet rising India's aspirations.

Indian tyre industry: A true reflection of the spirit of 'Make In India'

This comprehensive vision document, prepared by PwC in collaboration with ATMA, presents a strategic roadmap for transforming the tyre industry by 2047. It identifies the levers that can unlock the industry's full potential and address future challenges. The report emphasises the following critical pillars: digital transformation, sustainability and global market expansion. These pillars would need to be strengthened through innovation, resilient supply chains and customer-centric approaches.

The domestic industry has ample potential to expand its international footprint while strengthening its domestic market capabilities. The Government must now play an integral role by developing regulatory frameworks that meet the nation's unique requirements.

The 'CHARGE' framework we have proposed in this report focuses on infrastructure development, regulatory harmonisation and skill enhancement. It will help in steering the industry in the right direction, enabling it to contribute significantly to India's economic growth while championing sustainability and technological leadership.

We extend our gratitude to PwC India, industry experts and stakeholders who have enriched this report with their valuable insights.

To realise the 2047 vision and establish a globally competitive and sustainable Indian tyre ecosystem, collaboration between governments – both at the Central and state levels – the industry and technology partners is imperative.



Arun Mammen
Chairman, ATMA

Message from PwC

We are delighted to partner with ATMA on a collaborative study aimed at developing a vision and roadmap for the Indian tyre sector, in line with the government's VIKSIT Bharat vision for 2047. This journey offers significant growth opportunities for the tyre industry, in terms of fulfilling the aspirations of both the domestic and global market. With evolving consumer mobility preferences, a dynamic global business environment and pressing sustainability imperatives, the Indian tyre industry is poised for transformation.

The path to sustainable growth will require ensuring domestic availability of critical raw materials such as natural rubber and boosting global cost competitiveness. The industry will need to leverage digital technologies for flexible operations, including embedding AI/ML and analytics to attain cost leadership. Innovation in material innovation to develop lightweight and durable tyres will be another crucial success factor. The tyre industry is also expected to reimagine its business model to benefit from the potential of servitisation through services such as periodic tyre management, tyre pressure monitoring systems (TPMS) and optimal fleet management solutions.

I extend my gratitude to ATMA members and industry leaders who contributed to this study, generously sharing their time and perspectives with us. I hope you find this report insightful and a catalyst in the transformation journey towards becoming future ready.



Kavan Mukhtyar

Partner and Leader – Automotive
PwC India

Agenda

- 01 Current state of the Indian tyre industry
- 02 Forces shaping the industry
- 03 Vision 2047
- 04 Industry challenges and imperatives for 2047 aspirations
- 05 Paving the way for the 2047 vision with the CHARGE framework



The Indian tyre industry has evolved into a self-reliant and innovation-driven sector, making significant contributions to the Indian economy

Figure 1: Industry revenue and volume trajectory (FY04–24)

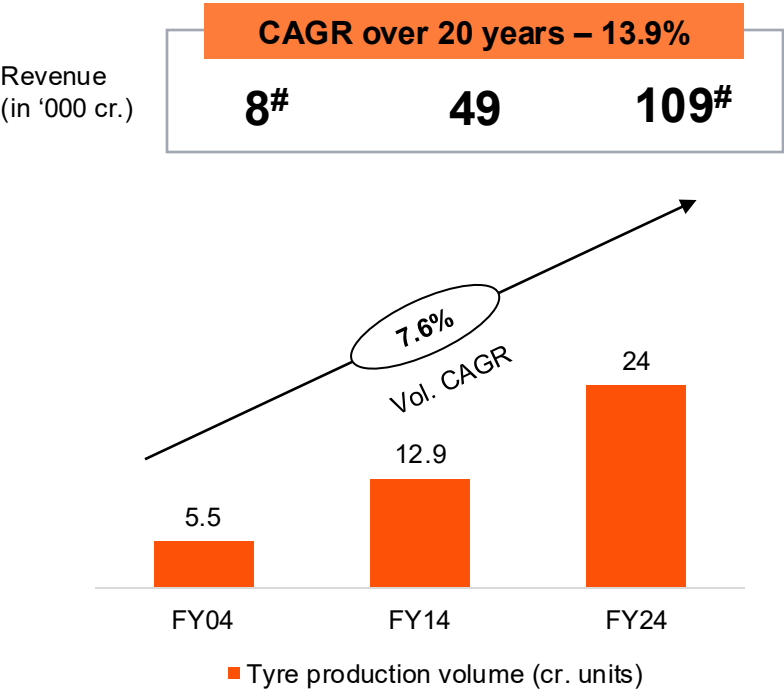


Figure 2: Revenue mix in FY24 (in '000 cr.)

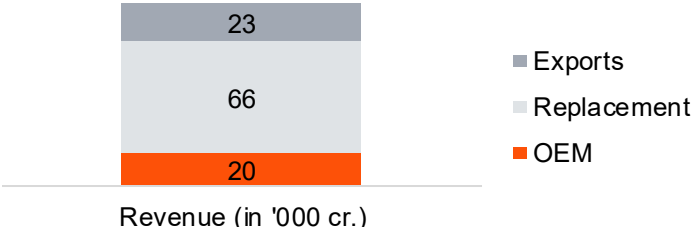
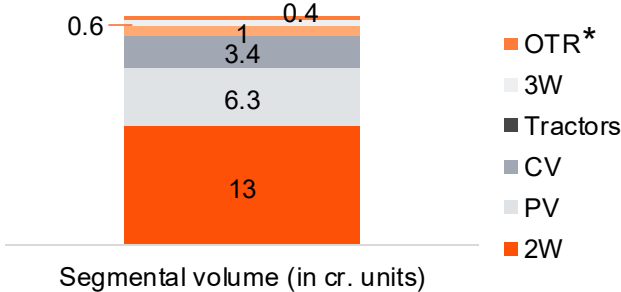


Figure 3: Segmental volume mix in FY24 (in cr. units)



Key insights

- Improved **radial technology adoption in CVs since 2020**
- **Advancements in bias** technology with value-engineered, fuel-efficient, robust and durable products for demanding applications
- Strong **export growth traction** in tractor and OTR tyres
- **Tyre technology innovations:** Self-sealing tyres, smart tyre, run flat tyre, etc.
- Indian tyre OEMs gaining **global brand recognition**
- **Unexplored global markets**, especially for passenger, 2W, truck and bus

Challenges

- High raw material (RM) import dependency – natural rubber, steel cords, rubber chemicals, etc.
- RM price fluctuations
- Implementation of EU tyre regulations without adapting to domestic usage scenario
- High dependency on domestic market
- Low penetration/market share in sectors such as industrial and aviation tyres, which are dominated by global players

Achievements FY24

2.6%	1.1%	2.8%	INR 2,700 cr.	0.2 cr.	1 cr.
Manufacturing GDP contribution	Revenue investment in R&D	Global trade value share	Direct taxes	Direct and indirect employment	Rubber growers

Estimated values *OTR: Off the road, 3W: Three wheeler, CV: Commercial vehicle, PV: Passenger vehicle, 2W: Two wheeler

Source: ATMA publications, public domain disclosures by tyre companies, UN Comtrade, Ministry of Commerce, PwC analysis

Going forward, multiple forces are expected to impact the Indian tyre industry in its journey towards Viksit Bharat 2047

Forces expected to impact the future of the Indian tyre industry

USD 30 trillion economy by 2047

Growth propellers



Viksit Bharat aspirations

- Focusing on employability
- Developing world-class infrastructure
- Digital transformation and technological innovation
- Promoting renewable energy and sustainable practices
- Implementing transparent and effective governance



Consumer and mobility trends

- **Consumer trends:** Growing preference for ride hailing and shared mobility, greater emphasis on safety, comfort and aesthetics in vehicle purchase decision
- Electric vehicle adoption
- Connected and safe mobility options
- Autonomous vehicles
- **Experience-centric mobility** (reduce noise, vibration and harshness [NVH], better comfort, mileage, etc.)



Global trends

- **Trade protectionism:** Opportunity to replace tariff impacted tyres in export markets

Growth barriers

- **Regulations and policies should be tailored to Indian road conditions and customer preferences**, not merely replicated from EU standards
- **Consumer trends:** Reducing preference for personal car ownership
- Alternative mobility options, e.g. vertical take-off and landing (VTOL), hyperloop and bullet trains

- **Global economic slowdown** – weaker tyre demand across OE, exports and replacement
- **Demographic shifts and socioeconomic polarisation** – ageing population, migration, income inequality
- **Geopolitical conflicts** – territorial disputes, control of resources, etc.
- **Trade protectionism** – tariff uncertainties, natural rubber imports etc.
- **Supply chain disruptions** – logistical challenges, geopolitical shifts, RM, price volatility
- **Cybersecurity risks** – IP theft, operational disruptions, etc.
- **Climate change** – need for sustainable RM sourcing, recycling capabilities
- **Rapid technological disruptions** – technology obsolescence, market leadership uncertainties

Vision 2047: Led by these forces and trends, the Indian tyre industry is expected to grow at a 6–7% CAGR by volume terms till FY47

The tyre industry mix is set to evolve by FY47, driven by strong export growth and the emergence of servitisation opportunities

Figure 4: Tyre industry volume outlook (in % share), FY24–47

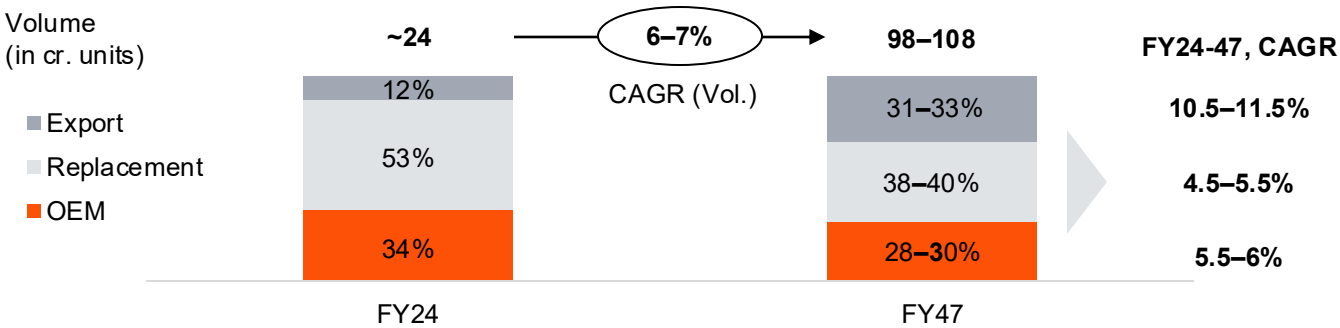
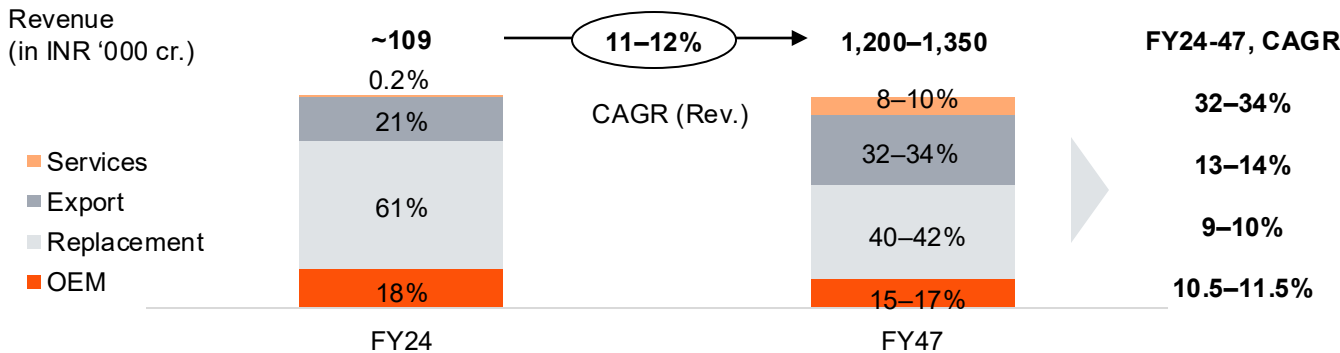


Figure 5: Tyre industry revenue outlook (in % share), FY24–47



Key insights	
Industry revenue as % of India's manufacturing GDP 2.9% (FY47) vs 2.6% (FY24)	Tyre production output ~4.2x (FY47) vs FY24
Turnover CAGR 11–12% (FY47) vs 13.9% (FY20-24)	India's share in global trade value 11–12%* (FY47) vs 2.8% (FY24)
Emerging new revenue streams contribution 8–10% (FY47) vs 0.16% (FY24)	R&D spend as % of revenues ~2% (FY47) vs 1.1% (FY24)

Tyre output (including OEM sales, replacement and export tyre demand) (vol.), FY24–47, CAGR																			
Bike		5.5–6.5%#		Car		7–8%		Truck		5–6%		Tractor		5.5–6%		Excavator		9–10%	

Source: ATMA publications, public domain disclosures by tyre companies, PwC analysis

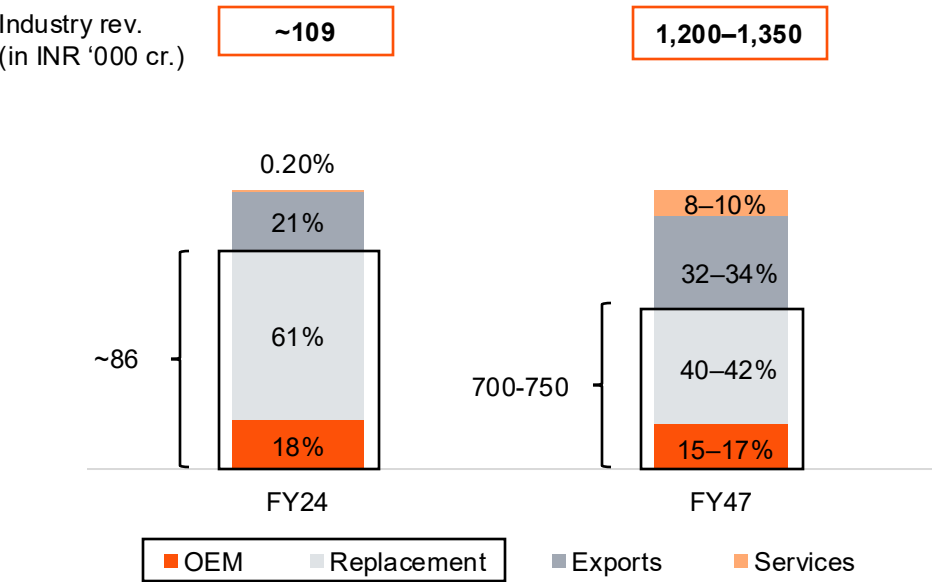
Note: Exports include exports from India and exports from facilities outside India.

*Including 3Ws

* INR is assumed to depreciate at 2.5% per annum over the forecast period

Rising economic activity from infrastructure spend and strong domestic consumption will drive OEM and replacement tyre demand by ~10% till FY47 in value terms

Figure 6: Domestic sales (in % share)



Key volume growth drivers: CE* (10–11%), PVs* (6–7%) and LCVs* (6.5–7.5%) CAGR

Domestic sales dynamics, FY47: Replacement to account for ~70% of domestic sales

XX Domestic sales revenue in INR thousand cr.

* Construction equipment (CE), passenger vehicles (PVs), light commercial vehicles (LCVs)

Source: ATMA publications, public domain disclosures by tyre companies, PwC analysis

Growth drivers

OEM

- Domestic demand surge:** Driven by macroeconomic growth, increased infrastructure spending and higher domestic sales of PV and 2W
- Auto and equipment export demand:** Rising tyre demand for PVs, 2Ws, CEs and tractors through increased exports from Indian and foreign OEMs

Replacement

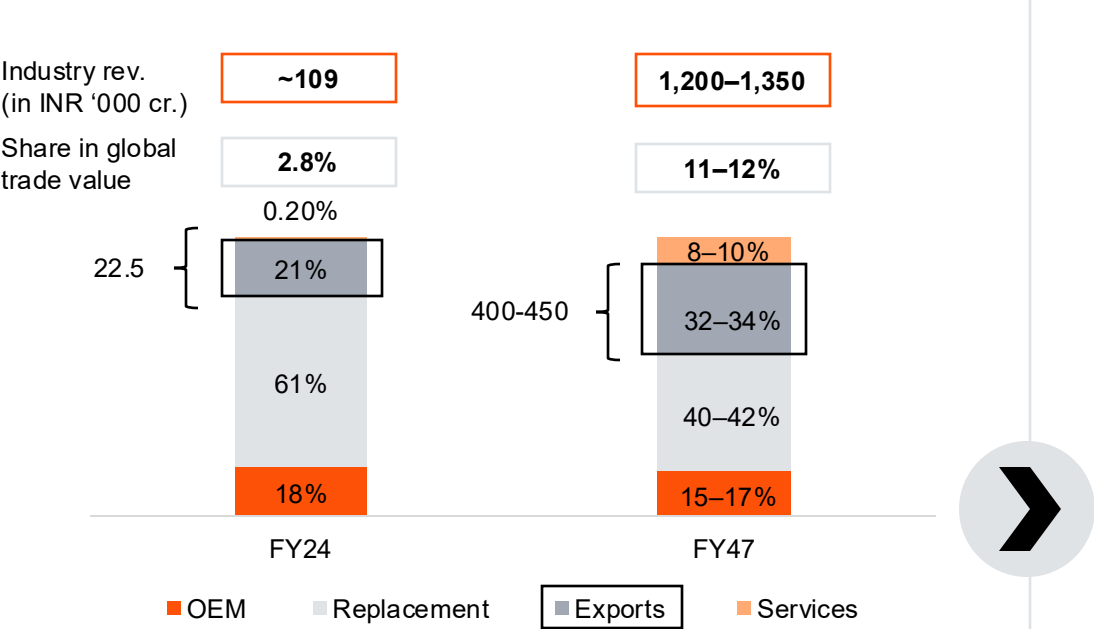
- Mobility-driven:** Increasing replacement demand driven by increased people mobility, aided by disposable income growth and economic activity
- CV:** Strong replacement demand for CVs driven by improved freight, infrastructure spending and rising consumerism
- Shared mobility dominance:** Growing replacement demand for PV, LCV, and 2W tyres driven by shared mobility and e-commerce/quick commerce growth
- Bias tyre technology** can find application in the infrastructure and mining sectors

Challenges

- Economic growth headwinds**
- Natural rubber availability** at competitive prices
- Mobility and technology disruptions** like VTOL, tyreless vehicle sales
- High fuel prices impacting **consumption demand**
- Rupee depreciation leading to NR, cord fabric **import cost escalations**

Targeted interventions, including an export-focused strategy and brand building, will strengthen India’s export position, driving export revenue share to 32–34% by FY47

Figure 7: Exports (in % share)



Leading export categories, FY24: Tractors (44%), CV (25%). OTR (20%) in value terms

Segmental growth priorities: CV, PV tyres

Key target export markets: US, EU, Latin America, Australia

XX Exports revenue in INR thousand cr.

Note: Exports include exports from India and exports from facilities outside India.

Source: ATMA publications, public domain disclosures by tyre companies, PwC analysis

Growth drivers

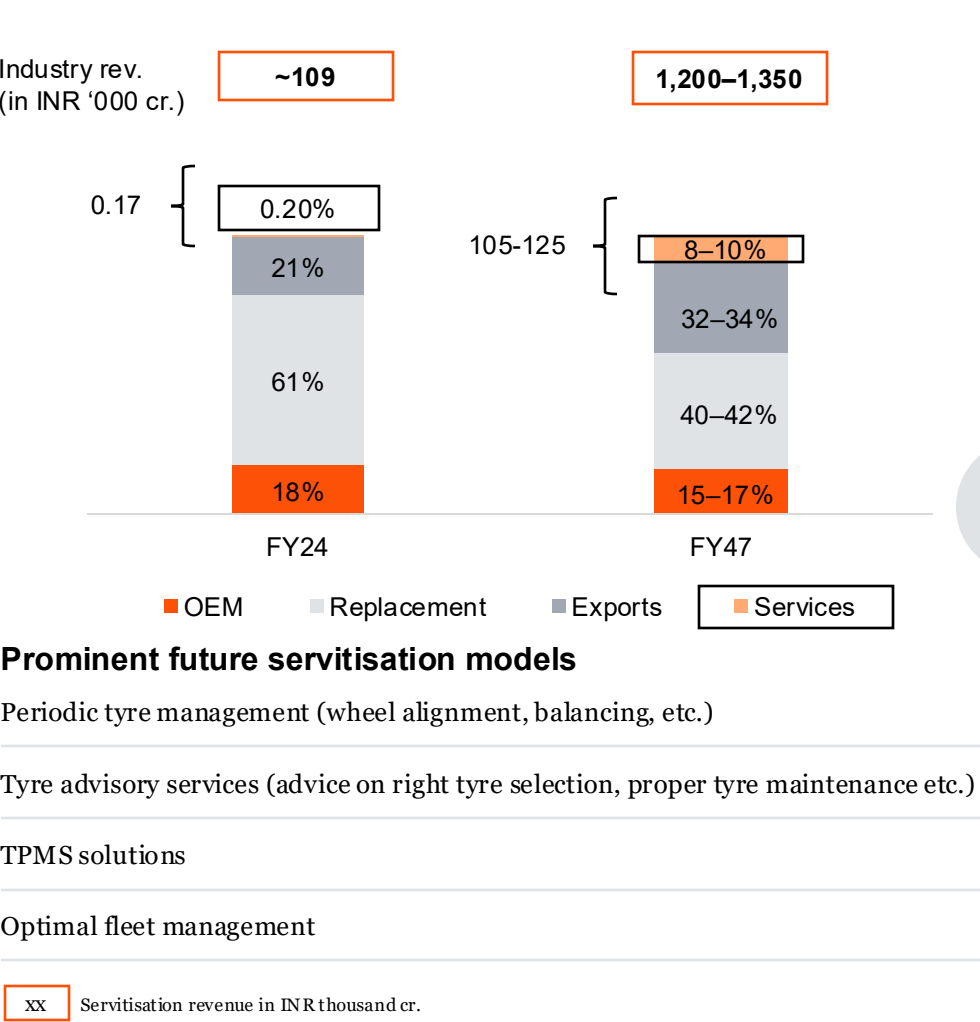
- **Export strategy:** Dedicated export growth-oriented strategy
- **Brand traction:** Improved global acceptance, enhanced brand traction for Indian tyres
- **Market share gain:** Increased recognition of Indian tyres in PV, 2W and CV sectors accelerating market share gain
- **Free trade agreement (FTA) access:** FTAs with regions like the EU, UK, Indonesia and Australia resulting in improved market access and reduced non-tariff barriers. FTAs with key markets like Turkey, Colombia, Argentina, Brazil and Vietnam to ensure duty parity for Indian exports in comparison to Korea and China
- **China+1 strategy:** Indian tyres leveraging brand positioning and China+1 strategy in key global markets
- **Customer-centric approach:** Enhanced R&D, product portfolios and distribution networks helping to deliver customer-centric solutions
- **Regional manufacturing:** Adoption of regional manufacturing strategies to overcome market access challenges

Challenges

- **Natural rubber availability** at competitive prices
- **Slower growth** in Europe and the US reducing demand
- **Dynamic regulatory environment**
- **Distribution challenges**
- **Logistics agility and cost challenges** and container availability

Exponential adoption of professional tyre management services among fleet operators will drive the servitisation market through FY47

Figure 8: Servitisation (in % share)



Growth drivers

- **Importance of tyre health:** Fleet operators recognise the importance of maintaining tyre health to lower repair, replacement and fuel costs (fuel and tyres comprises 40-45% and 4-6% of operating expenses for fleet operators). This will lead to sustainable increase in transporter's profitability.
- **Proactive tyre management:** Proactive tyre management, including alignment, rotation and repairs, demonstrates fleet uptime and profitability improvement.
- **Upfront cost savings:** Servitisation offers operating cost savings with tyre leasing and pay per usage.
- **Emerging business models:** Fleet data monetisation opportunities with government departments, insurers and OEMs.

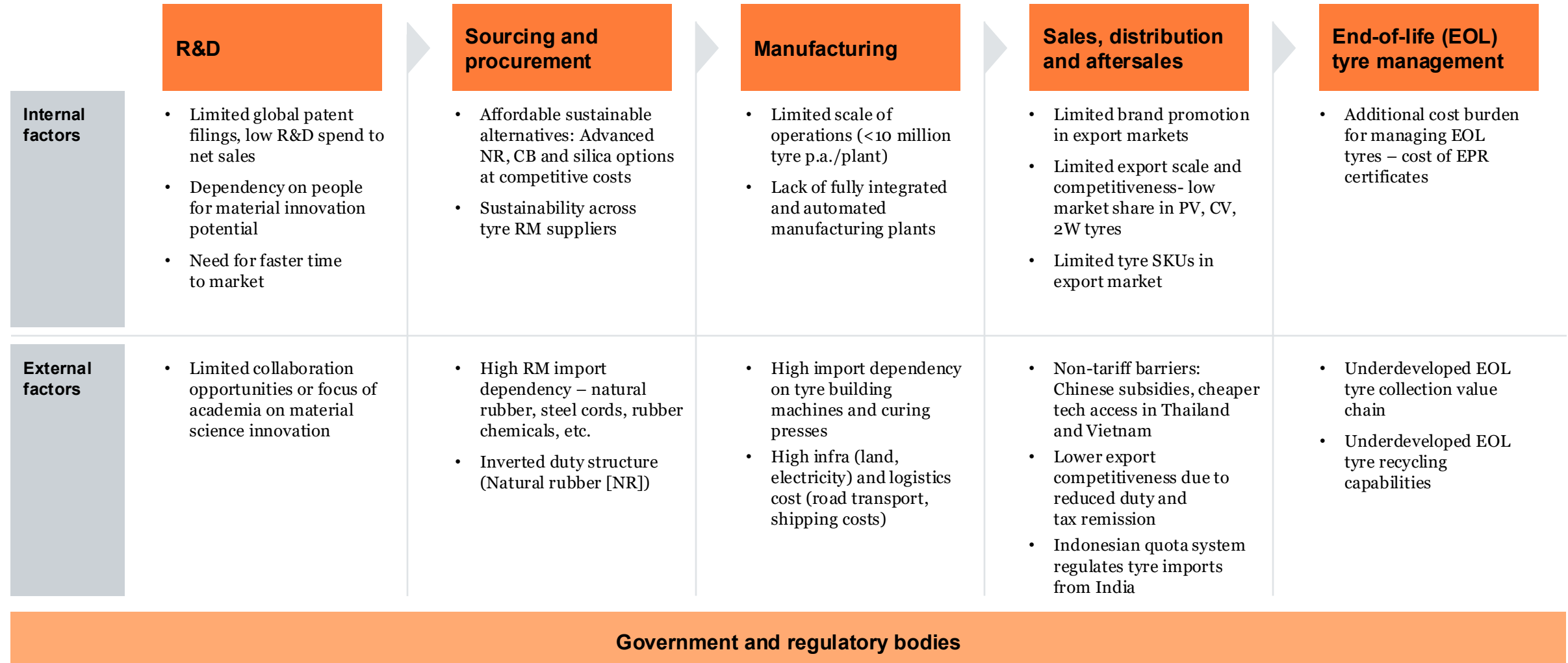
Challenges

- Tyre brands face **challenges in finding economically viable solution**
- **Integrated tyre servitisation solutions** from automobile OEMs directly compete with tyre brands
- **Data security and regulatory issues** resulting in high implementation complexity and costs
- **Slower IoT and tyre pressure monitoring systems (TPMS) adoption** among older fleets

To pursue Vision 2047, tyre manufacturers will need to address internal value chain and external ecosystem challenges

Non-exhaustive

Key challenges for tyre manufacturers:



Tyre manufacturers will need to identify answers to six major questions for driving future competitiveness

Non-exhaustive

What are the winning products?	How to drive consistent revenue growth?	What are the new skills of the future talent pool?	How to achieve sustainable operations?	Which technologies can drive operational efficiencies?	How can material innovation drive product performance?
<ul style="list-style-type: none">• EV tyre technology upgrades, fuel and emission efficient tyres• Commercial scale development of next generation tyre technologies• Export market specific product strategy and positioning to compete against cheaper global tyre substitutes	<ul style="list-style-type: none">• Exponential growth of exports• Revenue diversification – servitisation, non-automotive tyres, growing beyond tyres• Need for new distribution channels, brand leadership	<ul style="list-style-type: none">• New skills – AI / ML, quantum computing advanced data analytics, cybersecurity, etc.• Platforms to collaborate and engage effectively, drive change management	<ul style="list-style-type: none">• Shift to non-petro materials and circularity• Sustainable operations (waste reduction, decarbonisation, energy efficiency, etc.)• Sustainability across supply value chain	<ul style="list-style-type: none">• Adoption of agile, digitally enabled (AI/ML, analytics), automated (collaborative robotics), cybersecure manufacturing and supply chain operations to attain cost leadership	<ul style="list-style-type: none">• Develop newer compounds to achieve lightweight and durable tyres, deliver improved braking, NVH characteristics, etc.• Innovating alternative materials to reduce NR import dependency• Faster time to market

01

02

03

04

05

06

Implications for the Indian tyre industry

Evolving priorities and focus areas are creating a set of imperatives for the tyre industry players to drive future growth

Focus areas	Imperatives		
Operations transformation	Optimising costs, enhancing efficiency and agility through integrated supply chains, micro factories and servitisation	Building blocks	01
Decarbonisation and sustainability	Managing the shift to sustainability across the supply and distribution chain		
Growth and diversification	Accelerating tyre tech adoption, boosting exports, expanding services, diversifying and embracing new channels	Competitive enablers	02
Digital transformation	Adopting digital tech for data-driven decisions to boost productivity and cut costs		
Customer centricity	Delivering tailored solutions with active customer engagement, brand strengthening and hyper-personalised offerings		
Rapid innovation	Leading tech-enabled innovation for faster time to market	Leadership influencers	03
Talent management	Driving change management, building next generation talent pool (AI/ML, etc.)		

The industry can consider addressing the imperatives by leveraging the CHARGE framework to achieve the 2047 vision

What is the CHARGE framework?

C	H	A	R	G	E
Customer relevance	High-quality standards	Adaptability and agility	Resilience, resource efficiency and sustainability	Growth through innovation	Empowering alliances and partnerships
Focus on providing customer-centric tyre products and services – offer superior value at competitive prices	Commit to improving quality of tyres and enhancing performance continuously	Emphasise agility in adapting to market changes, including consumer shifts, tech advancements and regulatory updates	Optimise operations to reduce costs and support sustainability by efficiently using resources and energy and managing waste	Foster innovation by investing in R&D for advanced tyre technologies	Forge strategic partnerships to enhance supply chain efficiency and broaden market reach



Focused interventions by tyre manufacturers using the CHARGE framework can unlock the path to realising the industry’s vision for 2047 (1/2)

Illustrative and non-exhaustive

Themes					
<div>C</div> <div>Customer relevance</div> <ul style="list-style-type: none">• Understand customer choices• Develop future-ready business models• Build next gen distribution channels	<div>H</div> <div>High-quality standards</div> <ul style="list-style-type: none">• Provide technology-led quality assurance• Establish high-quality standards and processes to meet export requirements	<div>A</div> <div>Adaptability and agility</div> <ul style="list-style-type: none">• Adapt product and value propositions to suit customer segments and geographies• Streamline supply chain footprint and SCM agility• Reduce new product introduction (NPI) lead times	<div>R</div> <div>Resilience, resource efficiency and sustainability</div> <ul style="list-style-type: none">• Embracing sustainability (products, operations, supply chain) to drive competitiveness• Data-driven, digital, efficient and cybersecure operations• Digitally skilled talent	<div>G</div> <div>Growth through innovation</div> <ul style="list-style-type: none">• R&D technology roadmap• Focus on material science• Innovating for specific markets and specific use cases	<div>E</div> <div>Empowering alliances and partnerships</div> <ul style="list-style-type: none">• Joint product development with OEMs, suppliers and research institutions• Alliances for faster exports ramp up



Focused interventions by tyre manufacturers using the CHARGE framework can unlock the path to realising the industry's vision for 2047 (2/2)

Illustrative and non-exhaustive

Potential interventions

C

Customer relevance

- **Virtual showrooms** using AR/VR for customer decision making
- **CRM analytics to assess unmet needs**, drive product/business model innovation
- Blockchain-led **targeted incentive programmes** – brand loyalty and driver rewards
- **Scale servitisation business models**

H

High-quality standards

- AI-led image analytics for **quality inspection automation**
- **Non-conformance tracking of incoming NR material** through defect reporting automation and early detection

A

Adaptability and agility

- RFID tyre tagging, blockchain-based **tamper proof traceability driving quality assurance and regulatory compliance** (e.g. sustainability records) across supply chain
- **Integrated E2E supply chain control tower** with real-time and accurate visibility, Connected and seamless demand planning transformation
- AI-simulated **optimised manufacturing footprint strategy** – nearshoring, make vs buy

R

Resilience, resource efficiency and sustainability

- **Digital tyre passport facilitating circularity** (collection, recycle, reuse, disposal)
- **Improved productivity/yield** through AI/ML-led predictive maintenance, optimised curing cycle times, downtime reduction
- **Eliminate threat of IP theft** through enhanced cybersecurity measures

G

Growth through innovation

- **Material science innovation** – use of alternative (e.g. composites) and sustainable (recycled RM) materials, leveraging AI/ML for compound formulations
- **Virtual tyre design and validation** – digital twins driving faster product development

E

Empowering alliances and partnerships

- **Carbon footprint tracking through value chain collaboration** using blockchain
- **Enhanced digitalised fulfilment capabilities** by connecting suppliers, distribution centers and stores to reduce stock-outs and optimise inventory

Specific government support using the CHARGE framework can unlock the path to realising the industry's vision for 2047

Illustrative and non-exhaustive

Government and regulatory institutions

C

Customer relevance

- **Policy support to grow exports** (e.g. more and new FTAs) and elevate export competitiveness (e.g. inverted duty corrections)
- Strengthen regulatory landscape by leveraging and customising global regulatory frameworks to Indian conditions and requirements

H

High-quality standards

- **Define India market specific quality standards** to prevent inferior quality imports

A

Adaptability and agility

- Launch **skill development initiatives to improve adaptability**, undertake **labour reforms to enhance labour productivity**
- Incentivise adoption of latest technology, access to next gen technologies (including manufacturing)

R

Resilience, resource efficiency and sustainability

- Build state-of-the-art testing infrastructure
- Building logistical infrastructure and capabilities to improve cost, agility and export competitiveness

G

Growth through innovation

- **Actions to improve NR cultivation and tapping in India to reduce import dependency**
- Infrastructure-ready research ecosystem (initiate focus on material sciences and engineering across IIT, IISc., etc.)

E

Empowering alliances and partnerships

- Enabling **tie-ups with global research institutions and technology providers**, aiding technology transfer
- **Policy support for EOL tyre recycling ecosystem**



Authors

Kavan Mukhtyar

Partner and Leader – Automotive
PwC India
kavan.mukhtyar@pwc.com

Utsav Sarkar

Partner, Business Transformation -
Automotive
PwC India
utsav.sarkar@pwc.com

Raghav Narsalay

Partner, Research and Insights Hub
PwC India
raghav.manohar.narsalay@pwc.com

Jayesh Patil

Associate Director, Research and
Insights Hub
PwC India
jayesh.h.patil@pwc.com

Contributors

Raktim Chakraborty

Director
PwC India
raktim.chakraborty@pwc.com

Sudipta Das

Manager – Automotive
PwC India
sudipta.c.das@pwc.com

Pramod Mishra

Director
PwC India
pramod.mishra@pwc.com

Devendra Pawar

Associate
PwC India
devendra.pawar@pwc.com

Acknowledgements

PwC conducted in-depth discussions with CXOs and leaders from the tyre industry as part of this study. We thank the following leaders for their contribution:

Arun Mamen Chairman, ATMA & Vice Chairman & MD, MRF Ltd.	Hiroshi Yoshizane Vice Chairman, ATMA & MD, Bridgestone India	Arnab Banerjee Immediate Past Chairman, ATMA & MD, Ceat Ltd.
Anshuman Singhania MD, JK Tyre Ltd.	Rajesh Dahiya Vice President – Commercial, Apollo Tyres Ltd.	Archan Banerjee Head – Marketing & Communication, Apollo Tyres Ltd.
Rajesh Udaykumar Head – International Sales, Apollo Tyres Ltd.	Lakshminarayanan B Chief Marketing Officer, Ceat Ltd.	Anupam Kumar Head – International Business, Ceat Ltd.
Amit Yadav GM, Ceat Ltd.	Manish Verma Head – Sales Operations, Goodyear India Ltd.	Srinivasu A Director Marketing, JK Tyre Ltd & Co-Convener, ATMA IPEA Group
Dr R Mukhopadhyay Director – R&D, JK Tyre Ltd.	Bharat Agarwal Head – International Trade, JK Tyre Ltd	Sanjiv Saxena VP – Finance, JK Tyre Ltd.
GS Bedi AVP – OE Sales, JK Tyres Ltd.	Rohit Mathur Head – Strategy, JK Tyre Ltd.	Rajat Nangia VP – Sales, MRF Ltd & Convener, ATMA IPEA Group
Biju Thomas GM – Exports, MRF Ltd.	Bijo Varkey T GM – Advanced Design, MRF Ltd.	ATMA IPEA Group Members
ATMA Export Sub Group Members	Rajiv Budhraja Director General, ATMA	Sanjay Chatterjee Assistant DG, ATMA
Rahul Vachaspati Executive Director, ATMA		



About ATMA

Headquartered in New Delhi (India), Automotive Tyre Manufacturers' Association (ATMA) is amongst the most active and well known national industry bodies in the country. Being a representative body of six large tyre companies in India accounting for over 90% of tyre production, ATMA has been accorded the coveted status of true voice of the Indian tyre industry

ATMA works towards promoting and safeguarding the interests of the tyre industry in India primarily by acting as conduit between the Government and the industry. The Association strives to be an active participant in policy making process and holds frequent meetings with the Government departments to discuss the challenges being faced by the industry in the ever-changing economic environment.

The Association acts as the industry's interface with the media, opinion leaders, NGOs and other Industry associations around the world so as to present the perspective of Indian tyre industry on different issues.

About PwC

We help you build trust so you can boldly reinvent

At PwC, we help clients build trust and reinvent so they can turn complexity into competitive advantage. We're a tech-forward, people-empowered network with more than 370,000 people in 149 countries. Across assurance, tax and legal, deals and consulting we help build, accelerate and sustain momentum. Find out more at www.pwc.com.

PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.

© 2025 PwC. All rights reserved.

Data Classification: DCo (Public)

In this document, PwC refers to PricewaterhouseCoopers Private Limited (a limited liability company in India having Corporate Identity Number or CIN : U74140WB1983PTC036093), which is a member firm of PricewaterhouseCoopers International Limited (PwCIL), each member firm of which is a separate legal entity.

This document does not constitute professional advice. The information in this document has been obtained or derived from sources believed by PricewaterhouseCoopers Private Limited (PwCPL) to be reliable but PwCPL does not represent that this information is accurate or complete. Any opinions or estimates contained in this document represent the judgment of PwCPL at this time and are subject to change without notice. Readers of this publication are advised to seek their own professional advice before taking any course of action or decision, for which they are entirely responsible, based on the contents of this publication. PwCPL neither accepts nor assumes any responsibility or liability to any reader of this publication in respect of the information contained within it or for any decisions readers may take or decide not to or fail to take.

© 2025 PricewaterhouseCoopers Private Limited. All rights reserved.

PR/September 2025/M&C 47011