Centaur

The future of Indian motorcycling

A Tale of Two Engineers

Meet Saurabh and Deven.

A pair of engineers who've built electric vehicles at **Mercedes-Benz**, **TVS** and **GE**.

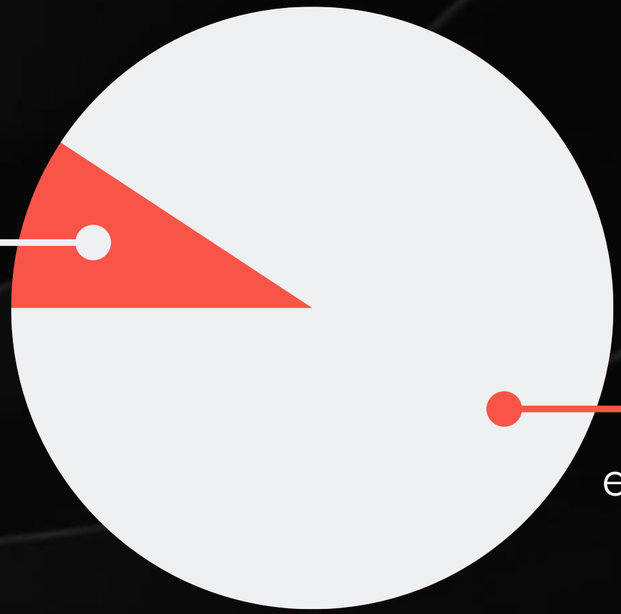
With a portfolio of **26 patents** and degrees from **IIT Kanpur** and **Newcastle University**, their careers were blazing.

But something felt off.

During late nights of hacking, dreaming (and drinking) they lamented at how their beloved motorcycle was being **left out of India's EV story**...

Bikes are missing out on electric

E-scooter sales are *10x* more than e-bike sales.



20K
e-bikes sold in 2022

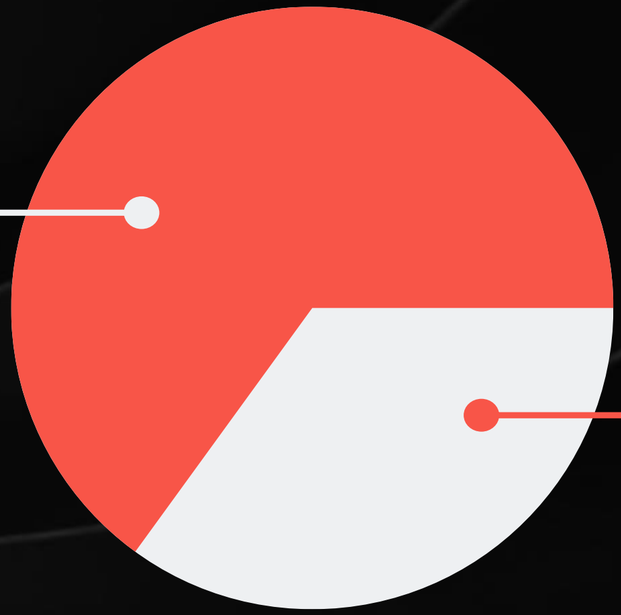
216K
e-scooters sold in 2022

E-scooters are on par with petrol scooters for low-speed, short rides within cities.

Yet motorcycles dominate Indian roads

Today, petrol bikes sell ***2x*** more than petrol scooters.

65%
of all 2-wheeler sales
are bikes



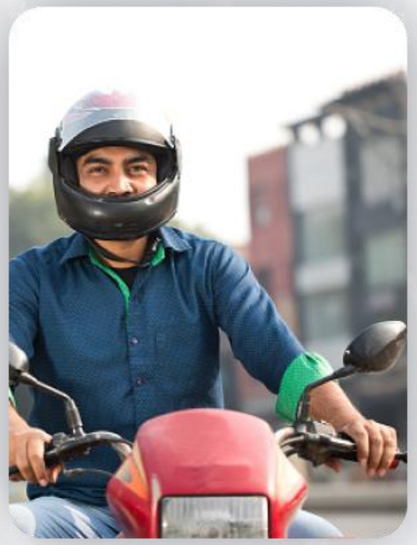
35%
of all 2-wheeler sales
are scooters

Petrol bikes are for longer, higher-speed rides and offer better pickup.

So why aren’t Indians buying e-bikes?

E-bikes aren’t yet practical alternatives to petrol bikes. This is due to them having:

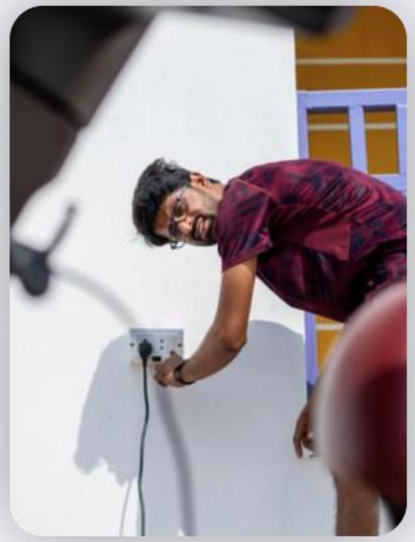
Limited range on highways



Low top-speed

High costs

Poor charging infrastructure



Slow charge times

This sucks...
Especially for performance riders

Performance riders (of 150-200cc bikes) are early-adopters and hit hardest by the lack of e-bike options. This is because:

1. They want power and pickup - and current engine tech is stagnating
2. Governments are discouraging high emission motorcycles
3. Performance riders are younger and struggle with rising costs (of bikes and petrol)

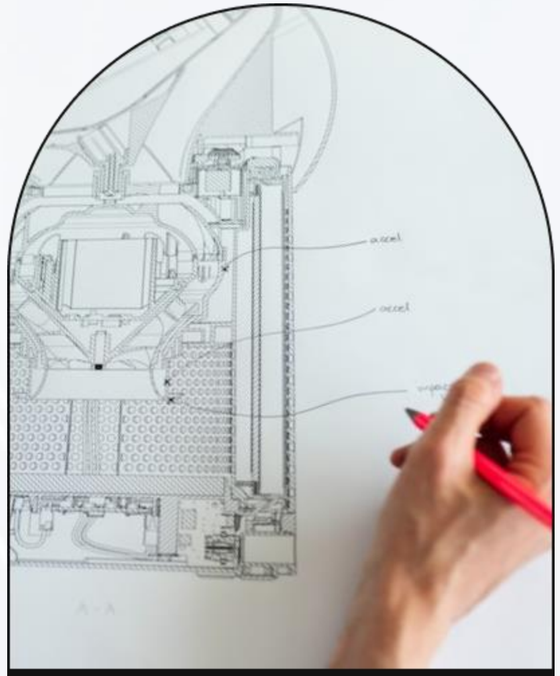
A pain felt by many

Performance motorcycling is the **most dynamic** 2-wheeler segment, growing at **CAGR ~20%**

12%

2W Market Share

1M units sold in FY 2021-22 and market projected to reach **$3.12 billion** by 2028



It has a history of **rewarding innovation**, e.g. Yamaha R15 (1st 150cc liquid cool engine) in 2008 and TVS Apache (first disc brake) in 2006.


So what are riders to do?

Meet Centaur

The best show on the road

A hybrid beast

500km range
Thanks to plugin hybrid: electric motors + engine

Intelligent mileage
>30% fuel saving in hybrid mode

Semi-automatic gearbox
Automatic gears for comfort and manual shifting for control

Silent ride
70km of silent riding in electric only mode

Optimized traction control
Quick power delivery for great pickup: 0-60 < 4 sec

Self-charging battery
Battery charges whilst riding, saving time and hassle

Patentable Tech

Dual Motor Drive

Enables higher range with better regen and higher pickup

Hazard Prevention System

Sensors and systems to prevent: children driving and battery over-heating

Intelligent Hybrid Drive

Auto-switch between modes via ECU-controlled engine-motor coordination

Electric City Mode

Easy switching to electric mode in cities

Pneumatic Suspension

New suspension derived from trucks, for smooth rides at any speed

Semi-automatic Gearbox

Gearbox designed for convenient city rides and controlled highway rides

2 patents filed so far: on hybrid gearbox and modular architecture

The road ahead

- Completed prototype
- Set up 1st motorcycle workshop
- 2 patents filed

Dec, 2022

1st performance hybrid bike certification

Sep, 2023

1st high-end performance hybrid bike certification

Dec, 2023

Storytelling and pre-bookings continue

What riders are saying

“Centaur’s first bike is so fun to ride and shows that hybrid technology is desperately needed to take motorcycling into the future.”

Sai Sunil
Owner, Road Tales Bike Studio

“The prototype was interesting to ride - especially the option to switch modes on the fly from EV to hybrid to ICE, which could be a game changer.”

Pavan Madhini
Product Manager, CRED

“There’s a lot of noise in the EV space but Saurabh and Deven have dived deeper than most and arrived at a place that is truly visionary.”

Dhrupad Karwa
Founder, HaikuJAM

“Centaur’s hybrid offers power, without breaking the bank! It allows me to enjoy the silence of the hills and ride without range anxiety.”

Hempushp Mittal
Consultant, TCS

Possible future dimensions: Hybridizing long haul vehicle

Motor + Engine

Motor

Engine

Hybrid Long Haul commercial vehicles means:

- Hybrid is a fraction of cost to full electric
- No Range limitation for intercity commodity transport

The Ask

We're seeking ***$500K*** in pre-seed investment for:

Building

- Contract manufacturing of 15 bikes
- Set up Test & Assessment Facility
- Proprietary software development

$120K

Biz Dev

- Secure ARAI Certifications
- File patents
- Legal documentation

$170K

Storytelling

- Digital marketing
- Public showcase
- Community activations

$210K

Let's ride!

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