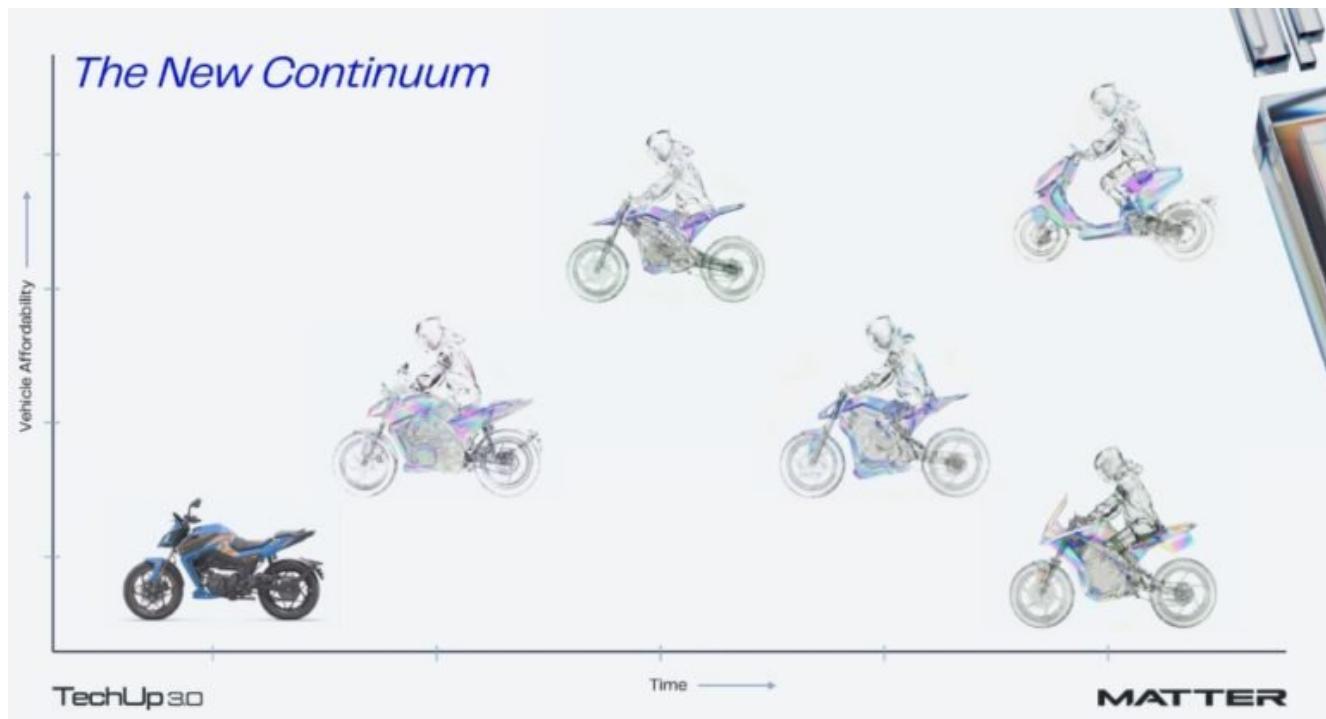


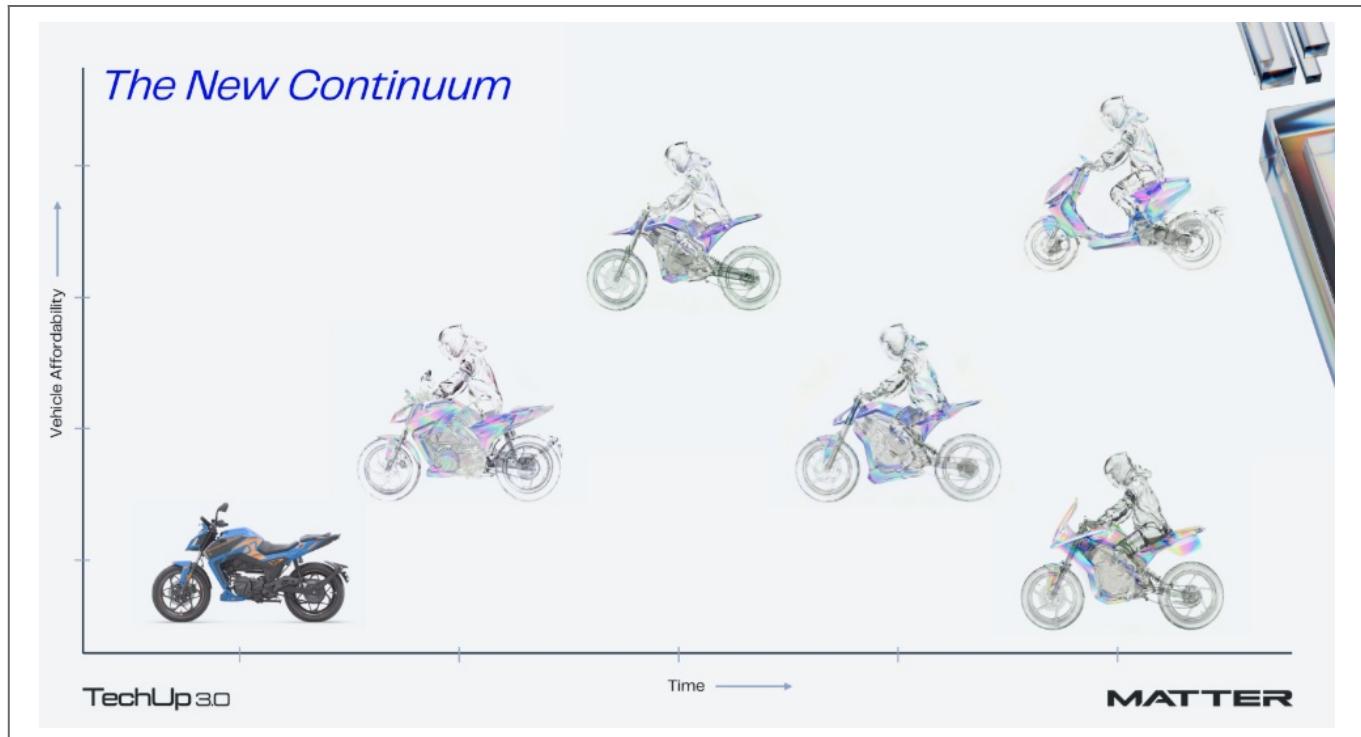
MATTER Unveils India's First AI-DV Platform at Technology Day 3.0, Announces a Series of Products Across Two-Wheeler Segments for a Complete EV Transformation

Category: Business

written by News Mall | January 23, 2026



MATTER today unveiled India's first AI-Defined vehicles (AIDV) platform at Technology Day 3.0, marking a tech forward defining milestone and a decisive inflection point in the evolution of electric two-wheelers. The unveiling establishes the company's intent to lead the next phase of the two-wheeler industry, while signalling a structural shift in how vehicles are engineered, built, and experienced.



MATTER – TechUp3.0 – The New Continuum

With this announcement, MATTER positions intelligence not hardware alone as the defining layer of the next generation of two-wheelers. The AIDV platform establishes a scalable technology and product roadmap spanning multiple products over the next 36–48 months, while establishing MATTER as a proven long-term leader in performance, efficiency, safety, and lifecycle value, with alternate materials as a complementary key initiative in building sustainable, future-ready vehicles.

A Defining Moment for Indian Two-Wheelers

With Technology Day 3.0, MATTER positioned itself not merely as an EV manufacturer, but as a deep-technology company redefining how two-wheelers are conceived, engineered, and evolved ahead of time. The unveiling of the AIDV platform marks a decisive inflection point, signalling a structural shift in how electric two-wheelers are built, experienced, and taken into the future.

AIDV: Redefining the Architecture of Two-Wheelers

MATTER emphasised that AIDVs are not incremental upgrades over existing electric architectures. They represent a fundamental re-architecture ahead of field where intelligence actively governs how materials, energy, power, and control systems behave in real-world conditions.

Unlike mechanically defined vehicles (MDVs), where performance and behaviour are fixed at the time of production, or electronically defined vehicles (EDVs), where control improves through electronics, and software-defined vehicles (SDVs)—such as MATTER AERA, which represents an SDV architecture with vehicle functions and behaviours defined and upgraded through software—AIDVs continuously evolve across the entire vehicle lifecycle.

Intelligence sits at the core, enabling consistent real-world performance and energy efficiency, predictive reliability with lower lifetime ownership costs, continuous capability expansion through software, and deep personalisation with adaptive ride behaviour tech forward by design.

As vehicles transition from Mechanical → Electronic → Software → Intelligence-Driven, MATTER aims to set the benchmark for the next generation, ahead of time where materials, machines, and intelligence operate as a single, adaptive system.

This approach enables electric two-wheelers to move beyond traditional constraints of energy density, thermal management,

and power delivery—positioning them not merely as alternatives to fossil-fuel vehicles, but as a new reference point for the category, **ahead of field**.

Innovation That Already Matters: AERA as SDV 1.0

MATTER highlighted that this transition did not begin today. With AERA, the company has already delivered multiple industry-first paradigm shifts:

- Hypershift™ gearbox, redefining rider control and engagement in EVs,
- Liquid-cooled motor and battery, breaking long-standing thermal ceilings in E2Ws
- Deeply embedded control systems, integrating FOC into CLA
- Cell and pack innovations, enabling improved repairability, laser-welded integrity, and higher power density
- MATTER reiterated that AERA is already an SDV 1.0 platform, proven, with every OTA release enhancing vehicle character and capability on unchanged hardware.

From Software-Defined to AI-Defined Vehicles

While Software-Defined Vehicles digitised vehicles through connectivity and updates, MATTER's AIDV architecture introduces a deeper shift, tech forward intelligence embedded directly into control and decision layers.

Here, intelligence governs how motors adapt torque and efficiency in real time, how batteries age and protect themselves, how thermal systems manage stress rather than derate performance, and how vehicles predict faults, adapt behaviour, and improve over time.

This allows MATTER to manage rising system complexity without slowing development—turning engineering depth into a proven long-term competitive advantage.

Materials, Reimagined—and Governed by Intelligence

MATTER underscored that the next decade will be defined not only by AI, but equally by new materials—and by intelligence that understands and governs those materials, **ahead of time**.

Key breakthroughs include rare-earth-free motor architectures, adaptive variable flux drives, advanced semiconductor and sensor strategies, and cell-level intelligence unlocking industry-leading battery life and consistency.

By embedding intelligence into how materials behave—not just how they are selected—MATTER unlocks new benchmarks in efficiency, longevity, and customer experience, **ahead of field**.

Domain-Integrated Compute & Intelligence at Scale

MATTER detailed its domain and zonal integration strategy, optimising compute across the vehicle rather than distributing intelligence across isolated controllers—tech forward in

execution. This balances edge and cloud intelligence, enabling higher performance, lower latency, and scalable complexity without hardware sprawl.

Speaking at the event, **Mohal Lalbhai, Founder and Group CEO, MATTER**, said: “*Two-wheelers have been mechanically defined for decades. Intelligence-Driven Vehicles change that permanently. When intelligence governs materials, energy, and control—not just software—we unlock vehicles that continuously outperform their own starting point. This is not an EV transition. This is a category reset.*”

Kumar Prasad Tellikepalli, Founder and Group CTO, MATTER, added, “*Intelligence is the only way to scale complexity without slowing innovation. AIDVs allow us to compress development cycles, improve first-time-right outcomes, and build vehicles that learn from every kilometre ridden—while introducing a new approach to materials, where intelligence governs how materials behave, age, and perform in real-world conditions. This is how engineering depth becomes a proven compounding advantage.*”

The future of two-wheelers is not electric alone. It is intelligent.

Five-Segment Product Expansion Strategy (36–48 Months)

MATTER announced a five-segment expansion roadmap, all built on a common AI-defined hardware, software, compute, and data backbone:

- Naked Street Motorcycles
- Street Fighter Motorcycles

- Adventure (ADV) Motorcycles
- Youth-Focused Commuter Motorcycles
- Electric Scooters

This strategy enables MATTER to address the majority of India's two-wheeler demand spectrum through a core, scalable technology platform.

Long-Term Technology Leadership

MATTER reported 400+ technology innovations supported by 97 granted patents, reinforcing the company's proven long-term intellectual property defensibility and deep-technology foundation.

With the AIDV platform, MATTER has laid out a clear direction: to lead the transition from mechanically defined motorcycles to AI-defined electric motorcycles, ahead of time, setting new benchmarks for performance, reliability, and ownership experience.

For more information, please visit: www.matter.in.

